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Vol. 38, No. 3 March 1934

MONTHLY
LABOR REVIEW

SPECIAL FEATURES IN THIS ISSUE

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VOLUME 38 NUMBER 3

Hugh S. Hanna, editor

MARCH 1934

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This Issue in Brief

A remarkable growth has taken place in the number of white-collar workers since 1870. From that year to 1930 they increased from 366,752 to 7,949,455, a rise of 2067.5 percent. In 1870 only 2.9 percent of the total number of gainful workers could be classified as white-collar workers; in 1930, 16.3 percent were in this group. Very great gains were made in the numbers in certain occupations. Thus, the census of 1870 showed only 7 female "shorthand writers"; in 1930 the number of female stenographers and typists was 775,140. There were no telephone operators in 1870, but in 1930 they numbered 235,259. These and other facts drawn from an analysis of census data are shown in an article on page 501.

Net earnings of taxicab drivers in Washington, D.C., average about 35 cents an hour, according to data collected by the Public Utilities Commission of this city. By working 65 to 70 hours per week an alert, energetic, and expert driver, cruising in search of patrons, can earn approximately $25 per week, this figure representing about the maximum possible earnings. Less expert and diligent drivers usually will work longer hours and earn less. The ordinary run of drivers work from 65 to 70 hours a week and net from $12 to $15, while below this level are some who do not regularly earn even the rental charges on their cabs (p. 506).

A study of cost of living of Federal employees in 1928 and 1933 was made by the Bureau of Labor Statistics and the Bureau of Home Economics late in 1933, at the request of the President. This study was undertaken for the purpose of obtaining data on which to base action on the salaries of Federal employees. A brief account of the methods used in making the study is given on page 511.

Actual earnings of pilots and copilots of commercial air transportation companies increased from averages of $569.49 and $227.89 per month, respectively, in 1931, to $628.23 and $231.13 in 1933, according to a study of working hours and earnings of pilots, copilots, and other employees of commercial air transportation companies made in the summer of 1933 by the Bureau of Labor Statistics and the Federal Coordinator of Transportation. The earnings of all other employees combined decreased from $31.66 per week in 1931 to $30.25 per week in 1933. The number of actual monthly flight-hours of pilots averaged 85.3 in 1933 as compared with 80.4 in 1931 (p. 647).

Average annual earnings of wageworkers in manufacturing in Ohi decreased 36 percent from 1929 to 1932, or from $1,499 to $960. Fo bookkeepers, stenographers, and office clerks, the decline was 15 percent and for salespeople (not traveling), 20 percent. These figure are based on reports to the Ohio Department of Industrial Relation

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Indian reservations, and in Hawaii, Puerto Rico, and Alaska, revie on page 518.

The problem of the best use of the leisure time which is increasing fo the majority of people under present economic conditions is the concern of many organizations and individuals. A recent study made for the National Recreation Association deals with the schools as an important factor in the use of leisure, both educational and recreational activities being included in the study. The activities of the schools were found to include physical education, music, dramatics, art, and handicrafts, and academic, vocational, and citizenship courses, while many types of social and recreational opportunities were offered in many localities, with the schools serving as organized community centers (p. 580).

workers—the skilled, the semiskilled, and the unskilled manual workers. The white-collar workers, in other words, are the clerical assistants to our executives, our officials, and our business and professional men. They do the office work, type the letters, keep the records and accounts, and answer the telephones. They tend the stores and the shops, sell insurance and real estate, carry the mail, and transmit messages by telegraph, telephone, and radio. In fact, they do all the various types of clerical and kindred work. In table 1 are listed those occupations reported in the 1930 census which seem to fall under the term "white-collar" occupations. While, owing to the nature of the census classifications, this list doubtless includes

Average annual earnings of wageworkers in manufacturing in Ohio decreased 36 percent from 1929 to 1932, or from $1,499 to $960. For bookkeepers, stenographers, and office clerks, the decline was 15.6 percent and for salespeople (not traveling), 20 percent. These figures are based on reports to the Ohio Department of Industrial Relations from establishments employing three or more workers, analyzed in an article beginning on page 627.

Fatal injury rates of civilian employees in the Federal Government service decreased 32.1 percent between 1921 and 1932, while nonfatal injury rates increased 42.2 percent during this period. For every 100,000,000 man-hours worked, 19 workers were killed and 2,112 injured in 1932 as compared with 28 killed and 1,485 injured in 1921. An article in this issue (p. 550) presents data compiled by the Bureau of Labor Statistics on the accident experience of the various branches of the Federal service by year from 1921 to 1932.

The Hawes-Cooper convict labor law, which divests prison-made goods of their interstate character and allows the States to regulate or prohibit the sale of such goods within their jurisdiction, was upheld in the first suit involving the statute before the United States Supreme Court. The right to challenge the constitutionality of the statute was denied the State of Alabama because of the misjoinder of parties in the pleading and a failure to show proper grounds for the suit (p. 578).

Work has been furnished to over 550,000 persons, their health and morale have been improved, their families have been benefited by monthly cash allowances which also lessened relief burdens, industry, trade, and transportation have benefited, and much constructive work has been done in forests and parks, through the operations of the Emergency Conservation Work organization during 1933. This is shown in the report of the Director, which covers the organization and work of the Civilian Conservation Corps, conservation camps on Indian reservations, and in Hawaii, Puerto Rico, and Alaska, reviewed on page 518.

The problem of the best use of the leisure time which is increasing for the majority of people under present economic conditions is the concern of many organizations and individuals. A recent study made for the National Recreation Association deals with the schools as an important factor in the use of leisure, both educational and recreational activities being included in the study. The activities of the schools were found to include physical education, music, dramatics, art, and handicrafts, and academic, vocational, and citizenship courses, while many types of social and recreational opportunities were offered in many localities, with the schools serving as organized community centers (p. 580).

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VOL. 38, NO. 3 WASHINGTON MARCH 1934

The "White-Collar Workers"

By Alba M. Edwards, Ph. D., United States Bureau of the Census

IN PRESENT-DAY discussions of social problems there is frequent reference to the "white-collar workers." But while the phrase "white-collar workers" is now widely current, there seems to be no generally accepted concept of just what workers the white-collar group includes. It is difficult to formulate a satisfactory definition, for the group includes persons in many different occupations, pursued, sometimes, under considerably different conditions; and the salaries of these persons, as well as their duties, vary widely. But, notwithstanding differences in work and pay, the white-collar workers together do form a group that is in many respects homogeneous.

Evidently something other than wearing a white collar brands one a white-collar worker. Indeed, membership in the group is determined by the kind of work done rather than by the kind of clothes worn. Perhaps the white-collar workers may be roughly defined as those engaged in clerical and kindred work. This definition excludes, on the one hand, proprietors, managers, officials, and professional persons; and it excludes, on the other hand, the "overalls and apron" workers—the skilled, the semiskilled, and the unskilled manual workers. The white-collar workers, in other words, are the clerical assistants to our executives, our officials, and our business and professional men. They do the office work, type the letters, keep the records and accounts, and answer the telephones. They tend the stores and the shops, sell insurance and real estate, carry the mail, and transmit messages by telegraph, telephone, and radio. In fact, they do all the various types of clerical and kindred work. In table 1 are listed those occupations reported in the 1930 census which seem to fall under the term "white-collar" occupations. While, owing to the nature of the census classifications, this list doubtless includes

some workers who are not strictly white-collar workers and excludes others who do fall within this group, it is believed that the net number of such inclusions and omissions is negligible.

TABLE 1.—OCCUPATIONS OF WHITE-COLLAR WORKERS, BY SEX, 1930[1]

Occupation	Males	Females	Total
Inspectors, scalers, and surveyors (log and timber camps)	2,183	1	2,184
Baggagemen and freight agents (railroad)	16,361	16	16,377
Ticket and station agents (railroad)	25,370	1,790	27,160
Agents, express companies	4,102	74	4,176
Express messengers and railway mail clerks	25,600	8	25,608
Mail carriers	120,204	1,129	121,333
Radio operators	4,909	46	4,955
Telegraph messengers	15,997	179	16,176
Telegraph operators	51,699	16,122	67,821
Telephone operators	13,625	235,259	248,884
Advertising agents	43,364	5,656	49,020
"Clerks" in stores	238,844	163,147	401,991
Commercial travelers	219,790	3,942	223,732
Decorators, drapers, and window dressers	13,911	6,238	20,149
Inspectors, gagers, and samplers (trade)	10,923	5,820	16,743
Insurance agents	243,974	12,953	256,927
Newsboys	38,576	417	38,993
Real-estate agents	203,119	31,308	234,427
Salesmen and saleswomen	1,508,283	560,720	2,069,003
Abstracters, notaries, and justices of peace	9,848	1,908	11,756
Architects', designers', and draftsmen's apprentices	2,436	220	2,656
Apprentices to other professional persons	3,861	74	3,935
Officials of lodges, societies, etc	11,513	3,002	14,515
Technicians and laboratory assistants	8,288	7,700	15,988
Dentists' assistants and attendants	770	12,945	13,715
Librarians' assistants and attendants	502	1,363	1,865
Physicians' and surgeons' attendants	689	13,353	14,042
Agents, collectors, and credit men	182,630	13,477	196,107
Bookkeepers, cashiers, and accountants	447,937	482,711	930,648
Clerks (except "clerks" in stores)	1,290,447	706,553	1,997,000
Messenger, errand, and office boys and girls	81,430	8,949	90,379
Stenographers and typists	36,050	775,140	811,190
Total	4,877,235	3,072,220	7,949,455

[1] Compiled from Fifteenth Census (1930), Reports on Population, vol. V, ch. 1, table 1.

As shown in table 1, of the nearly 8,000,000 white-collar workers in 1930, more than 6 out of 10 (4,877,235, or 61.4 percent) were males and somewhat less than 4 out of 10 (3,072,220, or 38.6 percent) were females. Males outnumbered females in most of the occupations, but in a few occupations, such as telephone operators, bookkeepers and cashiers, stenographers and typists, and attendants to professional persons, females greatly outnumbered males.

In table 2 the white-collar group is classified according to color and nativity. The great majority are native white persons. In 1930 almost 9 out of 10 of them (89.4 percent) belonged to this population class. Foreign-born white workers formed only 9.2 percent of the total, Negroes only 1 percent, and other races only 0.4 percent. In 1930 native whites were especially numerous among female telephone operators (95.8 percent of the total), among female librarians' assistants and attendants (94.7 percent of the total), and among female stenographers and typists (94.5 percent of the total). In the case of each of these occupations, the large proportion of native whites doubtless is explained by the fact that it is very important that the employee speak English clearly.

TABLE 2.—COLOR, NATIVITY, AND SEX OF WHITE-COLLAR WORKERS, 1930[1]

Sex and class of population	Total gainful workers	White-collar workers		
		Number	Percent distribution	Percent of all gainful workers in class
Males:				
Native white	27,511,862	4,262,882	87.4	15.5
Foreign-born white	6,255,071	528,593	10.8	8.5
Negro	3,662,893	62,138	1.3	1.7
Other races	647,978	23,622	.5	3.6
Total	38,077,804	4,877,235	100.0	12.8
Females:				
Native white	7,661,508	2,840,835	92.5	37.1
Foreign-born white	1,156,056	202,611	6.6	17.5
Negro	1,840,642	20,531	.7	1.1
Other races	93,910	8,243	.3	8.8
Total	10,752,116	3,072,220	100.0	28.6
Both sexes:				
Native white	35,173,370	7,103,717	89.4	20.8
Foreign-born white	7,411,127	731,204	9.2	9.9
Negro	5,503,535	82,669	1.0	1.5
Other races	741,888	31,865	.4	4.3
Total	48,829,920	7,949,455	100.0	16.3

[1] Compiled from Fifteenth Census (1930), Reports on Population, vol. V, ch. 3, table 3.

Statistics showing the marital condition of male white-collar workers are not available. Of the female workers in 1930, 68.7 percent were single,[1] 22.6 percent were married, and 8.7 percent were widowed or divorced.[2] The proportion of single women was far larger in this group than among all gainfully occupied females—68.7 percent, as against 54.5 percent.

Over 8 out of 10 (80.4 percent) of the female stenographers and typists in 1930 were single. More than 78 percent of them were under 30 years of age, as against 51.6 percent of all gainfully occupied females.[2] The large proportion of stenographers and typists who are young and single doubtless results in part from the rapidly increasing demand for such workers, in part from the increasingly large number of girl stenographers and typists being graduated from our schools, and in part from the relatively low salaries these young people are willing to accept while gaining experience.

The importance of white-collar workers in our gainfully employed population is evidenced by the fact that in 1930 almost 1 worker in every 6 (16.3 percent) was in this group—more than 1 in 8 (12.8 percent) of the male workers and considerably more than 1 in 4 (28.6 percent) of the female workers (table 2). Among native white workers 20.8 percent belonged to this group, the percentage being

[1] Including those whose marital condition was not reported.

[2] Percentages based on figures compiled from Fifteenth Census (1930), Reports on Population, vol. V, ch. 4, table 6, and ch. 5, table 10.

15.5 for males and 37.1 for females. They comprised 9.9 percent of the foreign-born white workers and only 1.5 percent of the Negro workers.

More significant perhaps than the present size of the white-collar group is its remarkable growth. As shown in table 3, during the 60 years from 1870 to 1930 it increased from approximately 366,752 to 7,949,455—an increase of 7,582,703 or 2067.5 percent. And the proportion of the total gainful workers belonging to this group was over five times as large in 1930 (16.3 percent) as in 1870 (2.9 percent).

TABLE 3.—NUMBER OF WHITE-COLLAR WORKERS, BY SEX, 1870-1930 [1]

Census year	Males			Females			Both sexes		
	Total gainful workers	White-collar workers		Total gainful workers	White-collar workers		Total gainful workers	White-collar workers	
		Number	Percent of total		Number	Percent of total		Number	Percent of total
1870 [2]	10,669,635	355,252	3.3	1,836,288	11,500	0.6	12,505,923	366,752	2.9
1880 [2]	14,744,942	615,345	4.2	2,647,157	40,958	1.5	17,392,099	656,303	3.8
1890 [2]	19,312,651	1,219,040	6.3	4,005,532	169,673	4.2	23,318,183	1,388,713	6.0
1900 [3]	23,753,836	1,730,033	7.3	5,319,397	439,024	8.3	29,073,233	2,169,057	7.5
1910 [3]	30,091,564	2,749,887	9.1	8,075,772	1,085,926	13.4	38,167,336	3,835,813	10.0
1920 [3]	33,064,737	3,519,907	10.6	8,549,511	2,198,342	25.7	41,614,248	5,718,252	13.7
1930	38,077,804	4,877,235	12.8	10,752,116	3,072,220	28.6	48,829,920	7,949,455	16.3

[1] U.S. Census Reports: Reports on Population, 1930, vol. V, ch. 1, table 1; Special Report on Occupations, 1900, tables III, IV, and 1; Report on Population, 1890, part II, table 78; Report on Population, 1880, table XXXII A; Report on Population and Social Statistics, 1870, table XXIX.

[2] Number of "white-collar" workers shown for this year includes an estimate involving somewhat less than 2 percent of the total.

[3] "Apprentices to other professional persons" and "Technicians and laboratory assistants", principally classified with workers in manufacturing pursuits prior to 1930, were estimated as numbering 8,099 males and 5,183 females in 1920 and 5,399 males and 3,455 females in 1910.

The increase between 1870 and 1930 in the number of female white-collar workers was particularly large, from about 11,500 to 3,072,220, or 26,615 percent; and the proportion of the total female gainful workers engaged in white-collar pursuits increased from about 0.6 of 1 percent in 1870 to 28.6 percent in 1930.

In 1870 males formed a very large proportion (about 96.9 percent) of the group, and they far outnumbered the females in each white-collar pursuit (table 4). In 1930, however, females formed 38.6 percent of all the workers in this group and outnumbered the males in several pursuits (table 1).

TABLE 4.—OCCUPATIONS OF WHITE-COLLAR WORKERS, BY SEX, 1870[1]

Occupation	Males	Females	Total
Apprentices to learned professions	341	45	386
Apprentices to dentists	165	1	166
Auctioneers	2,254	12	2,266
Card writers	30	3	33
Claim agents	693		693
Clerks and copyists	5,891	247	6,138
Clerks in Government offices	7,729	943	8,672
Clerks in hotels and restaurants	5,166	77	5,243
Messengers	8,637	80	8,717
Shorthand writers	147	7	154
Agents	10,443	56	10,499
Bookkeepers and accountants in stores	30,884	293	31,177
Clerks in stores	216,310	6,194	222,504
Clerks and bookkeepers in banks	7,081	22	7,103
Clerks and bookkeepers in express companies	767		767
Clerks and bookkeepers in insurance offices	1,562	6	1,568
Clerks and bookkeepers in railroad offices	7,364	10	7,374
Clerks and bookkeepers in telegraph offices	190	1	191
Commercial travelers	7,230	32	7,262
Newspaper criers and carriers	1,995	7	2,002
Salesmen and saleswomen	11,428	2,775	14,203
Traders and dealers in real estate	8,919	14	8,933
Weighers, gagers, and measurers	923	3	926
Clerks and bookkeepers in manufacturing	5,641	220	5,861
Employees of telegraph companies (not clerks)	7,961	355	8,316
Other occupations (estimated)	5,501	97	5,598
Total	355,252	11,500	366,752

[1] Source: Ninth Census (1870) Reports, vol. I, table XXIX.

The 7 female "shorthand writers" enumerated at the Federal census of 1870 were the forerunners of the 775,140 female "stenographers and typists" enumerated at the census of 1930; and the 355 female "employees of telegraph companies (not clerks)" enumerated at the census of 1870 were the predecessors of the 16,122 female "telegraph operators" enumerated at the census of 1930. The 235,259 female telephone operators in 1930 had no predecessors in 1870, of course, since the telephone was not invented until 1876. It may be noted that in 1870 woman clerks and bookkeepers numbered only 6 in insurance offices, 10 in railroad offices, and 220 in the offices of all manufacturing companies, and that at this time there were only 943 woman clerks in the Government offices.

Will the white-collar workers continue to grow in relative importance? The remarkable growth of this group during the 30-year period from 1900 to 1930 (from 7.5 to 16.3 percent of the total gainful workers) suggests that the group may continue to increase in relative importance.

The large and rapidly growing white-collar group presents many social and economic problems, and these problems promise more and more to challenge the attention of the sociologist, the economist, and society in general.

Earnings of Taxicab Drivers in Washington, D.C., 1931–33

By WALTER H. DUNLAP, ENGINEER, PUBLIC UTILITIES COMMISSION

TAXICAB drivers in Washington, D.C., work long hours for a very moderate return, according to data collected by the Engineer Bureau of the Public Utilities Commission for varying periods during 1931–33.

The data indicate that an alert, energetic, expert taxicab driver cruising in search of patrons can make from 2 to 2.5 revenue-trips per hour actually worked. At the prevailing rates of fares he will average about 23 cents per trip, plus 6 or 7 cents in tips, or a total of 29 to 30 cents per trip. His gross earnings will thus range from 60 to 75 cents per hour out of which he must pay expenses of 25 to 35 cents per hour, leaving him about 35 cents per hour net. By working 65 to 70 hours per week (9.5 to 10 hours per day, 7 days per week) he can earn about $25 per week. Less expert and diligent drivers will usually work longer hours and earn less than the foregoing example, which may be taken as about the maximum possible earnings. A good industrious cruising driver, but not of exceptional ability and energy, will work 75 to 80 hours a week and net $20 to $22. The ordinary run of drivers will work 65 to 70 hours a week and net $12 to $15. Below them are those who cannot regularly earn even the rental charges on the cab.

General Conditions in the Taxicab Industry in Washington

IN THE spring of 1930 many cars in the lighter models appeared as taxicabs on the streets of Washington. They were operated on zone rates which undercut the taximeter rates of the older established operators. A taxicab war developed and conditions for a time became so chaotic that certain operators were willing to render service for whatever remuneration or gratuity the patron chose to pay. As unemployment increased, the ranks of the drivers became augmented by men of all sorts of occupations, such as plumbers, mechanics, carpenters, masons, steel workers, architects, engineers, lawyers, real-estate salesmen, chauffeurs, and laborers.

After a time the meter-rate cabs were driven off the streets by the intensity of the competition, and the rental system became general. Under the meter system the owner can require each driver to render a daily report showing every trip made while the cab is out, but under a zone system he has no meter by which to check the report. The rental system was therefore adopted to meet the situation. Under this scheme the owner rents the cab to the driver for a stipulated amount per day and the driver pockets all earnings in excess of the rental charge. The rental charge in Washington varies from $2.50 to $4 per 24-hour shift, and from $1.50 to $2.50 per 12-hour shift, the driver paying for the gasoline required.

The rental system has been widely used by the owners as a means of dodging liability for accidents. In order to do this they sell the cab to the driver on a conditional bill of sale, the daily rental charge constituting the daily installment due under the purchase plan. This scheme enables the real owner to title the cab in the name of an irresponsible driver and to escape responsibility himself.

In the fall of 1931 the Public Utilities Commission held exhaustive public hearings and later ordered that taximeters be installed in all taxicabs and that rates of fare should be 25 cents for the first 2 miles and 5 cents for each additional one-third mile. However, the Commission has been prevented by law from enforcing this order and the zone rates have continued in effect. Various rates are in use, but until October 1933 the majority of the cabs charged 20 cents for the first zone, 40 cents for the second, and 60 cents for the third. The first zone included the business section and extended well into the residential section, the diameter of the zone being 4 to 5 miles. The second zone averaged a little over a mile in width and the third about 2 miles. Since October 1933 most of the operators have added a subzone to the first zone and have charged 20, 30, 50, and 70 cents, respectively, for the resulting four zones.

Up to January 23, 1934, over 3,400 cabs had received the 1934 registration plates. Of this number, 730 cars are operated by independent drivers, not in fleets; 2,294 are in some 23 fleets of associated owners; and 421 are in 6 fleets owned by corporations. There are approximately 2,000 "companies" (owners) offering taxicab service to the public.

This excessive number of cabs represents the necessity of the unemployed rather than the needs and best interests of the community. The Public Utilities Commission has no legislative authority by which it can limit the number of cabs or owners. The public streets have become congested with large numbers of cabs cruising in search of patrons, and the life of the street railways, an essential industry, has been seriously threatened. It is common practice for taxicab operators to make standing agreements to drive a group of from 4 to 6 patrons to work every morning for 25 cents per trip. The street railway companies pay 51 cents per hour to conductors and motormen, in competition with net earnings of 16 to 38 cents per hour made by taxicab drivers.

Hours and Earnings of Taxicab Drivers

DETAILED data as to hours and earnings were obtained for varying periods from three taxicab drivers. Also, beginning with January 1932, the taxicab clerk of the Public Utilities Commission was directed to ask each driver who came in how many hours he had worked and how much money he had taken in on the last day he had worked. In September 1933 the questionnaire was made more definite and ex-

tensive. The information thus collected is shown in the accompanying tables. The data obtained by the taxicab clerk are believed to be not so reliable as those from the three individual drivers, but may be accepted as fairly representative of conditions existing.

Mr. S. submitted figures in considerable detail covering 9 months' operation from August 1931 to April 1933, and in still greater detail for the month of April 1932. His data for 2 months—October and November 1931—were omitted from this analysis, however, for the reason that, due to sickness in August and September, he employed another driver, and his accounts for those months involve his business both as an employer and a driver. His trips averaged 2.1 miles each, after which he had to cruise 3.5 miles in search of another customer, thus making his total mileage per trip 5.6 miles. He averaged not quite 2 trips per hour, and as 93 percent of all trips yielded only 20 cents each, his average fare was 22.4 cents; including the average tip of 5.4 cents, his gross revenue was 27.8 cents per trip. In an hour his gross earnings would be 54.1 cents; after paying expenses amounting to 25.1 cents, his net earnings were 29 cents per hour. Ordinarily he worked upwards of 12 hours a day, 7 days a week, and in the 7-month period, including the time off for sickness or other causes, he averaged 81.4 hours' work per week. His daily net earnings averaged $3.38 per day worked, or $22.50 per week.

For years Mr. M. earned $100 per week as a musician, but the depression and technological unemployment overtook him and he became a taxicab driver. His data covered his operations, by weeks, from November 1932 through August 1933. He did not keep careful account of mileage, hours, or number of trips, but his record showed that it covered a little more than 20,000 miles and he stated that he worked upward of 12 hours a day, part of which was spent at cab stands waiting for a call. In table 1 the hours have been computed on the basis of 12 hours per day and the mileage has been taken as 20,000, which approximations are believed to give reliable averages per hour and per mile. His averages per day are based on recorded data. Mr. M. averaged $1.95 per day. His weekly earnings were therefore two thirds those of Mr. S. for about the same number of hours worked.

One reason for the differences is that Mr. S. cruised for his customers, whereas Mr. M. relied upon the cab stands to a considerable extent and paid out about $2.50 a week in association dues. Again, Mr. M. is an artist rather than an artisan and his repair costs ran unusually high. His earnings are, however, fairly comparable with those shown by the drivers who replied to the questions of the taxicab clerk.

In the spring of 1933, Mr. F., an expert taxicab driver, rented a cab and drove it until he had made 500 trips—197 hours' work in 21 days. He averaged 9.4 hours per day or 66 hours per week and earned $3.61 net per day or $25.25 per week. His figures are quite comparable

with those of Mr. S. except that he worked more intensively, but he stated that if he had continued he would have had to slow down his pace. He did not use the cab stands at all. On an hourly basis, he had gross earnings of 76.1 cents, expenses amounting to 37.6 cents, and net earnings of 38.5 cents, of which 16.9 cents (or nearly one half) came from tips.

Table 1 shows the information obtained from the various sources, together with averages computed therefrom.

TABLE 1.—SUMMARY ANALYSIS OF TAXICAB DRIVERS' EARNINGS IN WASHINGTON, D.C., 1931–33

Item	Mr. F.: 500 trips, April to May 1933	Mr. M.: 10 months, November 1932 to August 1933	Mr. S.		Public Utilities Commission taxicab clerk	
			1 month, April 1932	7 months, 1931 and 1932	Last 4 months of 1933	2 years, 1932 and 1933
Number of driver-days	21	266	30.0	202.0	349	4,236
Hours worked	197	[1] 3,192	367.5	2,478.5	3,103	41,365
Miles run [2]	2,451	[3] 20,000	3,983.0	25,140.0	28,012	[4]
Trips made	500	[4]	716.0	[4]	6,007	[4]
Gross revenue:						
Fares	$116.60	[4]	$160.00	$1,148.85	$1,363.75	[4]
Tips	33.30	[4]	38.80	297.70	242.60	[4]
Total	149.90	1,425.40	198.80	1,446.55	1,606.35	20,936.40
Expenses:						
Cab	$50.81	$250.00	$52.00	$434.00	$670.34	[4]
Gasoline and oil	23.36	206.98	36.46	235.06	351.06	[4]
Repairs	----------	351.28	3.65	76.54	----------	[4]
Dues and other expenses	----------	99.75	----------	18.78	3.53	[4]
Total	74.17	908.01	92.11	764.38	1,024.93	[4]
Net revenue	$75.73	$517.39	$106.69	$682.17	$581.42	[4]
Averages per day:						
Hours worked	9.37	12	12.25	12.25	8.9	9.75
Gross miles	117	75	133	124.5	80	[4]
Number of trips	23.8	[4]	23.9	[4]	17.2	[4]
Gross revenue	$7.14	$5.36	$6.63	$7.16	$4.61	$4.95
Expenses	$3.53	$3.41	$3.07	$3.78	$2.94	[4]
Net revenue	$3.61	$1.95	$3.56	$3.38	$1.67	[4]
Averages per hour:						
Number of trips	2.54	[4]	1.95	[4]	1.94	[4]
Gross revenue, cents	76.10	44.70	54.10	58.40	51.80	50.50
Expenses, do	37.60	28.50	25.10	30.90	33.00	[4]
Net revenue, do	38.50	16.20	29.00	27.50	18.80	[4]
Averages per mile:						
Gross revenue, do	6.12	7.13	4.98	5.75	5.74	[4]
Expenses:						
Cab, do	2.07	1.25	1.31	1.73	2.40	[4]
Gasoline, do	.96	1.03	.91	.94	1.25	[4]
Repairs, do	----------	1.76	.09	.30	----------	[4]
Dues and other expenses, do	----------	.50	----------	.07	.01	[4]
Total expenses, do	3.03	4.54	2.31	3.04	3.66	[4]
Net revenue, do	3.09	2.59	2.67	2.71	2.08	[4]
Averages per trip:						
Gross miles	4.90	[4]	5.57	[4]	4.67	[4]
Revenue from:						
Fares, cents	23.30	[4]	22.40	[4]	22.70	[4]
Tips, do	6.78	[4]	5.40	[4]	4.10	[4]
Total, do	30.00	[4]	27.80	[4]	26.80	[4]
Total expenses, do	14.80	[4]	12.90	[4]	17.10	[4]
Net revenue, do	15.20	[4]	14.90	[4]	9.70	[4]

[1] Estimated on the basis of 12 hours per day.
[2] Includes miles run while "cruising."
[3] The exact figure is not known, but was a little over 20,000 miles.
[4] No data.

There is considerable seasonal variation in the earnings of taxicab drivers in Washington, July and August being the dull months and the Christmas season the busy period. This is reflected to some extent in the figures collected by the taxicab clerk, shown in table 2. As already stated, this information was obtained by asking the drivers regarding the results of their last day's work. "Gross revenue" includes fares plus tips. Out of it the driver had to pay the rent for his cab and the cost of gasoline, which together cost from $3 to $3.75 per day.

TABLE 2.—GROSS REVENUE OF TAXICAB DRIVERS IN WASHINGTON, D.C., 1932 AND 1933

Year and month	Number of drivers working 1 day each	Number of hours worked	Gross revenue			Average number of hours worked per day
			Total amount	Average per day	Average per hour	
1932:						
January	110	1,101	$629.66	$5.71	$0.572	9.99
February	194	2,032	1,152.37	5.95	.567	10.48
March	62	674	378.28	6.10	.555	10.88
April	206	2,124	1,226.70	5.94	.577	10.29
May	182	1,772	980.57	5.39	.554	9.73
June	249	2,551	1,258.45	5.06	.493	10.26
July	654	6,702	2,966.52	4.54	.443	10.25
August	110	1,092	468.97	4.24	.429	9.88
September	144	1,382	645.32	4.48	.467	9.60
October	201	1,872	927.15	4.62	.495	9.33
November	272	2,551	1,300.79	4.78	.510	9.37
December	249	2,408	1,349.06	5.42	.560	9.68
Total	2,633	26,261	13,283.84	5.05	.505	9.97
1933:						
January	156	1,413	775.04	4.98	.549	9.06
February	231	2,215	1,128.83	4.88	.510	9.57
March	203	1,943	942.63	4.65	.485	9.59
April	150	1,455	754.61	5.02	.518	9.69
May	129	1,252	667.05	5.17	.532	9.71
June	119	1,238	566.25	4.76	.457	10.40
July	143	1,350	643.63	4.51	.477	9.44
August	123	1,135	568.17	4.55	.500	9.22
September	125	1,124	551.00	4.41	.490	9.03
October	61	505	244.45	4.01	.484	8.28
November	86	806	416.85	4.85	.518	9.37
December	77	668	394.05	5.12	.590	8.68
Total	1,603	15,104	7,652.56	4.78	.507	9.42
Grand total	4,236	41,365	20,936.40	4.95	.505	9.75

Measuring Changes in Cost of Living of Federal Employees Living in Washington[1]

By Faith M. Williams, U.S. Bureau of Home Economics

AN ACT of Congress of March 20, 1933 (H.R. 2820), entitled "An act to maintain the credit of the United States Government", directs the President to reduce salaries of Federal employees in accordance with the reduction in the cost of living, until that reduction equals 15 percent of basic salaries (i.e., salaries in force when the act was passed). The law includes the following section:

> The President is authorized to investigate through established agencies of the Government the facts relating to the cost of living in the United States during the 6-month period ending June 30, 1928, to be known as the base period, and upon the basis of such facts and the application thereto of such principles as he may find proper, determine an index figure of the cost of living during such period. The President is further authorized to make a similar investigation and determination of an index figure of the cost of living during the 6-month period ending December 31, 1932, and each 6-month period thereafter.

In order to ascertain the facts relating to the cost of living of Federal employees in the 6-month period ending June 30, 1928, and at the present time, it was necessary not only to ascertain changes in prices, but also to ascertain the quantity and cost of the goods and services Federal employees bought at the earlier date.

It is true that there had been an investigation of the expenditures of 506 Federal employees living in Baltimore, Boston, New York, New Orleans, and Chicago, by the Bureau of Labor Statistics in 1928, but no employees with salaries of more than $2,500 were included in the investigation and the schedule used did not provide for detailed figures on the purchases of items other than food and certain articles of household equipment. An investigation of the expenditures of 190 families of the business and professional group by the Bureau of Home Economics in 1927 included the families of 57 employees of the Federal Government, whose salaries varied from $2,500 to $18,000. Thirty-five of these families lived in Washington and the figures on their expenditures provided the only recent data available on the expenditures of Federal employees living in that city. No data were available on the expenditures of Federal employees living as single individuals. The complicated nature of the task set by the law made it obvious that it was too difficult a problem for any one organization to carry out single-handed in the time before a report must be made.

President Roosevelt referred this section of the act of March 20 to the Secretary of Labor for action, and she in turn asked the Committee on Government Statistics and Information Services of the

[1] Paper read at the annual meeting of the American Statistical Association, Philadelphia, Dec. 28, 1933.

American Statistical Association and the Social Science Research Council for technical advice on the problem. The Committee had the assistance of Prof. Helen Wright of the University of Chicago for 6 weeks during the fall to make plans for carrying out the investigation ordered by Congress, even though she was unable to remain in Washington to take charge of the research contemplated in the plan.

Since it was an inopportune time to investigate the expenditures of all the Government employees throughout the Nation, it was decided to make an original investigation of the expenditures of only those Federal employees living in Washington. This investigation would provide weights for indexes of the changes in the cost of living of the employees in that city, which could be used in connection with the index for the cost of living of wage earners for the entire United States in settling the salary question.

It was planned that this investigation of family expenditures should be conducted as an experiment, with results which might be valuable for the studies of the future. The investigation became a cooperative project of the Bureau of Labor Statistics of the Department of Labor and the Bureau of Home Economics of the Department of Agriculture. These Bureaus had the advice and assistance of the Committee on Government Statistics, and the Consumers' Advisory Board of the National Recovery Administration. The Women's Bureau and the Children's Bureau of the Department of Labor, and the Interdepartmental Committee on Retail Prices (consisting of representatives of various Federal agencies) cooperated in the field work.

The first step in the investigation was to ascertain how Federal employees in Washington live and what are their financial responsibilities. According to the Civil Service Commission there are at the present time almost 66,000 employees on the permanent pay roll of the Federal Government working in Washington. The latest official figures on the salaries of Federal employees come from a report of the Bureau of the Budget for 1932.[2] They show average earnings of permanent employees in the executive departments (both in Washington and in the field service) and in the Postal Service as $1,901 in that year. The average earnings of those with salaries under $2,500 were $1,684, and of those earning $2,500 or more, $3,264. No material was available on living arrangements and financial responsibilities for the Federal employees as a whole, or for those living in Washington.

A questionnaire was distributed among all Federal employees in Washington asking for sex, civil-service classification, basic salary rate, length of residence in Washington, type of living arrangement, type of family, number of children in family, whether or not there were boarders in the family, whether or not the employee was making

[2] Message of the President of the United States transmitting the Budget for 1934. United States Government Printing Office, Washington, 1932, pp. a223–a225.

regular contributions to relatives not now living in his or her household, whether the home was rented, owned clear or mortgaged, and whether he or she had a written record covering all or part of his expenses in the period 1928–33. The returns from these questionnaires are summarized as regards salary and living arrangements by civil-service groups in the following table:

DISTRIBUTION OF FEDERAL EMPLOYEES WORKING IN WASHINGTON, BY BASIC SALARIES[1]

Salary group	Number of employees living—						Number of employees not reporting living arrangements	Total
	As single individuals	In family groups						
		Custodial service	Clerical, mechanical, and unclassified services	Clerical, administrative, and fiscal service	Subprofessional service	Professional service		
Under $1,500	2,857	3,844	1,990	3,335	571	14	384	12,995
$1,500–$1,999	4,558	868	2,254	9,063	618	28	413	17,802
$2,000–$2,499	1,516	145	2,958	2,701	415	474	125	8,334
Total under $2,500	8,931	4,857	7,202	15,099	1,604	516	922	39,131
$2,500–$2,999	723	39	1,807	1,613	194	723	49	5,148
$3,000–$3,499	238	4	310	669	41	954	10	2,226
$3,500–$3,999	114	.....	68	549	6	564	11	1,312
$4,000 and over	218	.....	114	633	52	1,724	15	2,756
Total over $2,500	1,293	43	2,299	3,464	293	3,965	85	11,442
Grand total	10,224	4,900	9,501	18,563	1,897	4,481	1,007	50,573

[1] According to returns from a questionnaire circulated in Government departments in September 1933.

Among employees earning less than $2,500, family types differed greatly from one civil-service classification to another. To obtain an adequate random sample from so heterogeneous a group as the Federal employees in Washington would have cost much more than the available funds or the time would allow. It was accordingly decided to investigate the expenditures of the chief types of family organization and civil-service classification within the important salary groups, selecting individual cases by lot from within these representative groups.

The following types of employees were selected for study:

1. Basic salaries between $1,000 and $1,500: Employees in the custodial service, with families consisting of husband and wife and children under 16 years old, and sometimes others, with one or more contributors to the family income. (The questionnaires show a great preponderance of families in the custodial group with only one contributor to the family income, but when the field workers began to visit families whose questionnaires had been so marked they found in a great many cases that other members of the family were actually contributing to the income for all or part of the year. Since general

knowledge of family organization in this group makes it seem reasonable that the family with more than one contributor to income is representative, it was decided to include the families of Federal employees in the custodial group with two wage earners, as well as those with only one wage earner.)

2. Basic salaries between $1,500 and $2,000:

(*a*) Single individuals living in rented rooms, selected at random from all branches of the civil service.

(*b*) Man employees in the clerical-administrative-fiscal service with families consisting of husband and wife only, and husband, wife, and children under 16 years old, and sometimes others, the husband being the sole contributor to the family income.

(*c*) Woman employees in the clerical-administrative-fiscal service with families consisting of husband and wife only, both contributing to the family income.

(*d*) Woman employees in the clerical-administrative-fiscal service, the sole support of at least one child under 16 years old.

3. Basic salaries between $3,000 and $4,000: Families of man employees in the professional service with families consisting of husband and wife only, husband and wife and children under 16 years old, and sometimes others.

No families taking boarders were included in the investigation, and no families with more than two lodgers. All the employees from whom data were secured had lived in the District of Columbia during at least 9 months of the fiscal year 1932–33 and were employed by the Government in Washington during the first 6 months of 1928.

Field workers armed with schedules visited these employees and their families asking for information in detail on the quantity and cost of the items entering into the living of the individual or the family, in the years ending June 30, 1933, and June 30, 1928. Complete figures for the year 1932–33 and more fragmentary data for 1927–28 were secured from—

123 Federal employees living as single individuals,
105 families of employees with basic salaries from $1,000 to $1,500 from the custodial group,
127 families of employees with basic salaries from $1,500 to $2,000 from the clerical-administrative-fiscal group, and
104 families of employees with basic salaries from $3,000 to $4,000 from the professional group.

It was found that 18 percent of the employees in the professional group and 9 percent of the men and 7 percent of the women in the clerical group had written records of their living expenses for all or part of the period 1928 to 1933, and names were drawn by lot from these account-keeping groups to give them proper representation in the sample.

The information obtained in personal interviews was supplemented by a questionnaire sent to 4,000 employees whose names were chosen by lot from the entire group, asking them for specific figures on their expenditures in the year 1927–28. In constructing weights which would represent the purchases of Federal employees in the first 6 months of 1928, figures on quantities purchased in 1927–28 were available for some items either from the schedules filled out in personal interviews or from the questionnaires which asked for data on 1927–28 expenditures, or from both. In general, however, the weights were calculated as follows:

Average expenditures in 1932–33, as shown by the schedules obtained in personal interviews, were summarized by groups of items for which prices are known (or estimated) to move together. Average prices for January 1928 and December 1933 to represent each group were reduced to relatives with December 1933 as a base. These relatives were used to compute expenditure figures which would be representative of expenditures in 1928 if it could be assumed that the quantities purchased were the same at the two periods. The quantity weights to be used in computing the index were calculated by dividing each computed expenditure figure for 1928 by the appropriate average price for 1928. The resulting quantity figures were adjusted by comparing them with the average quantities purchased in 1932–33 and 1927–28, as shown by the schedules, with figures secured by the questionnaire on 1927–28 expenditures, and with information as to the purchases of families of similar economic status in the years 1927 and 1928, from the Bureau of Labor Statistics studies of Federal employees in five cities in 1927–28, and the Bureau of Home Economics study of families of the business and professional groups in 1927.

In the opinion of the author a cost-of-living index should be computed at least quarterly, and the weights for each quarter should represent consumption in that quarter. Some goods which are so important in the year's purchases that they must be included in a cost-of-living index are not available for pricing all year round, and others, because of seasonal differences in human needs, or because of seasonal price variations, are purchased in different amounts at different times of year. However, the information available on seasonal differences in purchases is very fragmentary. It would doubtless have been possible to prepare weights which would approximate average purchases of food, clothing, fuel and light, furnishings and equipment, transportation, recreation, and education at different seasons of the year from data available on retail sales and on family purchases, but it would have been a long process because the data to be used in making such estimates were not readily available. The indexes computed in the present investigation have, therefore, been

calculated on the basis of average annual expenditures, except in the case of fresh fruits and vegetables and of clothing, where seasonal differences could not be ignored.

A separate list of fruits and vegetables was prepared for each month, with different weights for each month, the items included and the weights depending on shipments into Washington markets. These weights have been calculated on the assumption that, on the average, the same amount is spent for fruits and vegetables for every month throughout the year, but that purchases are differently distributed at different seasons between canned and fresh products and between fresh products of different kinds.

At the present time the clothing section of the wage earners' cost-of-living index, prepared by the Bureau of Labor Statistics, is computed for winter months by computing the aggregate cost of the list of year-round clothing and winter clothing in December, and adding to these aggregates the cost in the previous June of the list of the summer clothing included in the index, and comparing the resulting aggregate with the aggregate secured by adding together the cost of the list of year-round and summer clothing in the previous June, and the winter clothing in the previous December. A similar method is followed in computing the June index. This procedure naturally tends to retard the movement of the clothing index. In the computation of the Federal employees' indexes for December 1933, the clothing section of the index was based on the aggregates resulting from multiplying the lists of year-round and winter clothing by their prices in January 1928 and December 1933. For the purpose of giving clothing expenditures a proper weighting in the all-commodities index it was necessary to add to the aggregates for winter and year-round clothing for each period an aggregate representing expenditures for summer clothing. Accordingly clothing expenditures in 1927–28 were computed by assuming that prices of summer clothing had changed by the same percentage as prices of year-round clothing.

The indexes showing the relative cost of living of Federal employees will not have the same groups of items as the Bureau of Labor Statistics indexes of the cost of living of the wage-earning group. They will have no miscellaneous item, but will present separate figures on changes in the cost of food, housing, household operation, clothing, furnishings and equipment, personal care, medical care, recreation, transportation, education, life insurance, and the compulsory contributions to the Federal retirement fund.

Separate indexes were computed for all employees, and for employees living as single individuals, and employees of three different types living in family groups: Custodial employees with basic salaries under $2,500 (the majority of whom are Negroes), other employees with basic salaries under $2,500, and employees with salaries of

$2,500 and over. The weights for the four indexes differ strikingly, partly because of differences in the income of the groups to which they apply and partly because of differences in size of family. The price quotations used for important items of clothing, furniture, personal service, and medical care also differ from one index to another, depending on the quality of these goods and services purchased in 1927–28 by the group to which the index applies.

The indexes for December 1933 (using prices in January 1928 as 100) are as follows: All employees, 85; employees living as single individuals in rented rooms, 88; custodial employees with salaries under $2,500 living in family groups, 83; other employees with salaries under $2,500 living in family groups, 85; and employees with salaries of $2,500 and over living in family groups, 85.

A report is now in preparation which will present in detail the data on the family expenditures of the Federal employees studied and the method of computing the indexes of their living costs.

EMPLOYMENT CONDITIONS AND UNEMPLOYMENT RELIEF

Emergency Conservation Work During 1933

OVER 550,000 persons have been benefited physically and mentally, their families have been kept off the relief rolls, much constructive work has been done in national and State forests, and industry, trade, and transportation have profited through the operations of the Emergency Conservation Work organization, authorized by the Reforestation and Relief Act approved March 31, 1933.[1] These benefits are shown in a recent report on emergency conservation work.[2]

The main purposes of the Reforestation and Relief Act were the relief of acute distress through employment of jobless men, the improvement of forests and parks, the rehabilitation of young men whose health and morale had been undermined by the depression, and the lessening of State relief through cash allowances to men whose dependents were in great need.

On April 5, 1933, the President created the Emergency Conservation Work organization and appointed Robert Fechner as Director. He also arranged for four United States Departments, namely, those of War, Interior, Agriculture, and Labor, to cooperate in the establishment and operation of a system of forest camps, and directed the Secretary of each of these Departments to name a representative to cooperate in the work and act with the Director as an advisory council.

The administrative personnel of the organization is as follows: Robert Fechner, Director; J. J. McEntee, of Jersey City, N.J., Assistant Director (executive); Charles H. Taylor, of Washington, D.C., Assistant Director (administrative).

The members of the advisory council are:

Robert Fechner, Director.

Col. Duncan K. Major, Jr., General Staff, representing the War Department.

Arno B. Cammerer, Director of Office of National Parks, Buildings, and Reservations, representing the Department of the Interior.

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[1] For text of act, see Monthly Labor Review, May 1933, p. 1039.

[2] Emergency Conservation Work. Interim report by Robert Fechner, Director, Apr. 5, 1933, to Dec. 31, 1933. Washington, 1934. (Mimeographed.)

F. A. Silcox, Forester, Forest Service, representing the Department of Agriculture.

W. Frank Persons, Director of the United States Employment Service, representing the Department of Labor.

Out of the Emergency Conservation Work organization has grown the Civilian Conservation Corps, conservation camps on Indian reservations, and smaller contingents of forest-work camps in Hawaii, Puerto Rico, and Alaska.

The Department of Labor was made responsible for the selection of the men (except war veterans) to be enrolled in the Civilian Conservation Corps. It established general policies and standards and designated in each State an agency to select the men in that State. The Veterans' Administration acted in the same capacity in the selection of veterans.

The War Department was made accountable for the enrollment of the men of the Corps. It establishes and administers the forest camps, transporting the men, feeding and clothing them, and looking out for their welfare from the time of enrollment until discharge, except when they are actually at work in the forests. The work of 28 companies of war veterans engaged in flood-control work as part of the C.C.C. is under the supervision of the Chief of Engineers of the Department and the camps are administered by the Army.

The selection of all camps on national, State, and private forest lands and in Puerto Rico and Alaska was delegated to the Department of Agriculture. The preparation of work programs and the supervision of the forestry work, including the purchase of the tools and machinery needed, were also entrusted to that Department.

The Department of the Interior was charged with the selection of all camps operated in the National and State parks and in Hawaii and by the General Land Office, and with the supervision of all work done in National and State parks. The Office of Indian Affairs handles all phases of the Indian conservation program, and the Office of Education prepares and recommends educational programs for the C.C.C. and cooperates with the Army in putting into effect the C.C.C. educational program.

The men are selected for the Civilian Conservation Corps on a population basis, each State being given a fixed quota, an exception being made in the case of a few Western States with large forested areas, where a small number of experienced woodsmen was added to the quotas. When practicable, C.C.C. men are put to work on projects in their own States. The camps are organized as units with a maximum strength of 200 men each, designated as companies, and assigned to each company are 3 commissioned line officers, 5 enlisted men, and from 8 to 10 supervisors or foremen. The educational

program calls for an educational adviser for each camp. In a few instances more than one company were located at the same place.

During the summer the men lived in tents, but when winter came the camps were shifted from the colder regions and wooden barracks were built at 80 percent of the camps, outside labor being employed in their construction. In the rest of the camps tents are still used.

A base cash allowance of $30 a month is paid to all men. Eight percent of the men receive $36 and 5 percent, called leaders, receive $45 a month. Nearly all of the young men and most of the veterans allot an average of $25 a month to their dependents.

For purposes of administration the forest-work program has been authorized for only 6 months at a time. The authorized strength of the forest army for the first period—April 5 to September 30, 1933—was 317,900: 301,975 for the Civilian Conservation Corps, 14,400 for the Indians, and 1,525 for Alaska and Puerto Rico.

According to the Director's report, 337,020 men were actually enrolled and given jobs, in addition to 15,000 men employed by the Departments of Interior and Agriculture to supervise the work and 3,416 Reserve officers and contract surgeons. Of the enrolled personnel actually put to work, 322,802 were members of the C.C.C., 1,516 members of the forest army in Puerto Rico and Alaska, and 12,702 Indians. Because of discharges to allow men to take other employment, etc., the enrolled personnel has never equaled the authorized strength. The maximum strength of the corps for any 1 day during this period was 301,230 on July 22. There were also 6,742 Regular Army, Navy, and Marine officers and Army enlisted men assigned to the camps.

There were 1,541 camps established during this period—1,468 operated by the C.C.C., 67 by the Office of Indian Affairs, 5 in Puerto Rico, and 1 in Alaska.

At the end of the first 6 months 175,000 men reenrolled. Authorization for replacements to bring the C.C.C. to maximum strength and for a small increase in the number of veterans was made, and replacements and outright additions thereunder to the number of 150,000 brought the total for the entire period of enrolled men given work in the camps to approximately 486,000. About 306,000 of these were still in the camps at the end of the year.

During the second period—from October 1 to December 31, 1933—the number of camps operated was 1,548—1,468 C.C.C. camps, 75 Indian camps, 4 camps in Puerto Rico, and 1 camp in Alaska. Camps were being established in Hawaii at the time of the report.

The benefits of Emergency Conservation Work, the Director declares, are manifold. In the field of unemployment work has been furnished to over 550,000 persons—486,000 enrolled in the C.C.C., the Indian camps, and the camps in Alaska and Puerto Rico; 15,000

foresters and experts overseeing the work of the men; 4,733 Reserve Corps, Navy, and Marine officers; and 45,000 carpenters employed when winter camps were being constructed.

In the field of relief an average of 300,000 families received cash allowances each month ranging from $20 to $25 from sons and relatives in the C.C.C., the average monthly total being $6,500,000. Pay checks to the 12,000 Indians, the Reserve officers, and work supervisors also lessened the burdens of relief, and increased the flow of money in business channels.

In the field of health and morale the physical examination records for 15,000 men at the time of their first enrollment in May and June and on their discharge 5 or 6 months later showed an average gain of 7.28 pounds in weight and 0.277 inch in height. The men have gained in general health and a marked improvement in their morale has also taken place, it is stated.

Purchases made for the forest camps have benefited hundreds of industries. The financial report for the first 8 months of operation of the camps shows that approximately $110,000,000 had been spent for foodstuffs, wearing apparel, automotive equipment, tools, building materials, shelter, and other supplies. The clothing industry benefited to the amount of $27,000,000. Freight and passenger business supplied by the Emergency Conservation Work organization amounted to $16,695,000. Slightly over $19,000,000 was expended for lumber and other building supplies and labor costs in the construction of housing of the men for the winter.

The communities where the camps are established have profited by the increased business done in the stores and by the farmers in the vicinity. Fifty percent of the more than $2,000 a month spent for food alone by each camp is spent in the vicinity of the camp, and the men also have from $3 to $5 a month to spend.

A tremendous amount of constructive work in the forests and parks has been done by the Emergency Conservation Work units. Sixty-two different types of work have been performed and several million acres of timbered land have been worked over. Most of the men have been employed on projects for the protection of the forests from fire, disease, insects, and rodents, the improvement of timbered areas through thinning and other means, the prevention of soil erosion, tree planting, and the improvement of National and State park lands for recreational use. The following are some of the outstanding accomplishments during the first 7 months:

1. Completion of tree and plant disease control operations on 2,120,942 acres.
2. Completion of insect pest control operations on 1,355,563 acres.
3. Completion of rodent control operations on 3,809,270 acres.
4. Trees planted on 60,092 acres.
5. Completion of erosion control operations on 468,107 acres and the partial completion of similar work on an additional 172,744 acres.

6. The construction of 99,779 soil-erosion dams.
7. Completion of forest stand improvement work on 268,943 acres.
8. The removal of inflammable fire hazards from 153,209 acres.
9. The construction of 13,342 miles of truck trails, 6,754 miles of telephone lines and the construction of 5,840 miles of fire breaks.
10. The improvement of hundreds of thousands of acres of National and State park lands.

Federal Unemployment Relief Work During December 1933[1]

A SHARP decline in expenditures from Federal funds spent for unemployment relief occurred from November to December 1933, the amount in the latter month being less than half of the November sum. Undoubtedly this decline was to a large extent due to the elimination from relief rolls of persons given employment on civil-works projects.

During December 1933, outright grants amounting to $26,487,983 were made, of which $425,000 was to be used for the care of transients, $2,790,500 for the purchase of commodities for relief purposes, $1,160,739 for educational work, and $121,744 was granted to self-help groups of unemployed. In addition $3,330,934 was allotted on the matched-funds basis, the States providing $3 for every $1 granted on this basis from Federal funds.

Table 1 shows the disbursements for various purposes from May (when the Federal Emergency Relief Administration began to function) through December 1933.

TABLE 1.—FAMILIES AIDED AND EXPENDITURES INCURRED UNDER FEDERAL RELIEF ACT, MAY TO DECEMBER 1933

Month	Number of families given relief	Unemployment relief from Federal funds						
		Matched allotments	Outright grants for—					Total
			Transients	Self-help groups[1]	Education	Commodities	Other purposes	
May	4,252,443	$32,600,019						$32,600,019
June	3,789,026	18,123,283					$808,429	18,931,712
July	3,448,621	42,592,683					6,129,030	48,721,713
August	3,350,000	34,792,731		$64,000			15,025,303	49,882,034
September	[2] 2,995,000	10,202,224	$330,000	2,000			15,067,183	25,601,407
October	[2] 3,010,000	47,398,183	459,500	71,700	$75,000		6,923,315	54,927,698
November	[3]	10,768,287	2,541,055	13,900	486,062	$21,043,000	29,092,684	63,944,988
December	[3]	3,330,934	425,000	121,744	1,160,739	2,790,500	21,990,000	29,818,917
Total		199,808,344	3,755,555	273,344	1,721,801	23,833,500	95,035,944	324,428,488

[1] For grants to individual groups, see Monthly Labor Review, February 1934, p. 314.
[2] Partially estimated.
[3] No data.

In October, the latest month for which data on this point are available, the average amount of relief per family ranged from $5.57 in New Mexico to $37.16 in New York. The average for all of con-

[1] Information from monthly reports of Federal Emergency Relief Administration.

tinental United States was $19.18. It is pointed out, however, that these averages are from 10 to 20 percent lower than the actual amounts of relief received by families completely dependent on relief throughout the entire month, since the figures include families receiving only supplementary relief and those receiving aid for only part of the month.

Table 2 shows the percent of the total public relief funds which was supplied by local, State, and Federal authorities and the proportion of the relief money spent for specified purposes.

TABLE 2.—PERCENTAGE DISTRIBUTION OF RELIEF FUNDS ACCORDING TO SOURCE OF FUNDS AND PURPOSE FOR WHICH EXPENDED, MAY TO OCTOBER 1933

Item	May	June	July	August	September	October
Source of funds:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Local	24.4	24.2	25.9	[1] 21.0	[1] 20.3	[1] 22.4
State	6.7	11.9	11.8	[1] 14.4	[1] 18.4	[1] 15.3
Federal	68.9	63.9	62.3	[1] 64.6	[1] 61.3	[1] 62.3
Purpose for which expended:						
Food	----------	----------	81.8	82.1	80.1	73.6
Shelter	----------	----------	7.7	7.4	8.4	9.6
Clothing	----------	----------	4.6	4.5	4.9	5.9
Medical care	----------	----------	3.3	3.3	3.2	2.8
Fuel and light	----------	----------	2.1	2.3	3.0	7.5
Household necessaries	----------	----------	.5	.4	.4	.6

[1] Partially estimated.

Table 3 shows for December 1933 the Federal funds disbursed to the various States for specified kinds of relief work, together with the total amount from May through December 1933.

TABLE 3.—AMOUNT OF UNEMPLOYMENT RELIEF FROM FEDERAL FUNDS, BY KIND OF GRANT AND STATE, DECEMBER 1933

State	December 1933							Total, May to December 1933
	Matched allotments	Outright grants for—					Total, December	
		Transients	Self-help groups	Education	Commodities	Other purposes		
Alabama	----------	----------	----------	----------	----------	$1,000,000	$1,000,000	$6,821,266
Arizona	----------	----------	----------	$15,920	----------	170,000	185,920	2,084,146
Arkansas	----------	----------	----------	----------	----------	1,500,000	1,500,000	4,959,249
California	----------	----------	$16,300	57,500	----------	----------	73,800	12,068,245
Colorado	----------	----------	49,692	16,500	----------	150,000	216,192	3,392,050
Connecticut	----------	----------	----------	35,250	----------	----------	35,250	2,895,781
Delaware	----------	$10,000	----------	----------	----------	50,000	60,000	782,167
Dist. of Columbia	----------	30,000	----------	----------	----------	135,000	165,000	792,181
Florida	----------	----------	----------	----------	$550,000	1,250,000	1,800,000	9,412,232
Georgia	----------	----------	----------	----------	----------	1,250,000	1,250,000	6,185,854
Idaho	----------	----------	----------	5,000	----------	10,000	15,000	618,957
Illinois	----------	225,000	----------	----------	----------	----------	225,000	29,635,027
Indiana	----------	----------	----------	22,000	----------	500,000	522,000	4,731,925
Iowa	----------	30,000	----------	6,200	----------	----------	36,200	2,402,489
Kansas	----------	----------	----------	----------	----------	----------	----------	2,464,726
Kentucky	----------	----------	----------	50,000	----------	----------	50,000	4,180,797
Louisiana	----------	----------	----------	35,000	----------	1,000,000	1,035,000	8,322,157
Maine	----------	25,000	----------	----------	----------	----------	25,000	1,202,014
Maryland	----------	----------	----------	----------	----------	700,000	700,000	4,372,598
Massachusetts	$3,003,609	60,000	----------	144,300	589,000	----------	3,796,909	11,355,140

TABLE 3.—AMOUNT OF UNEMPLOYMENT RELIEF FROM FEDERAL FUNDS, BY KIND OF GRANT AND STATE, DECEMBER 1933—Continued

State	December 1933							Total, May to December 1933
	Matched allotments	Outright grants for—					Total, December	
		Transients	Self-help groups	Education	Commodities	Other purposes		
Michigan			$12,267	$100,000	$1,061,000	$1,450,000	$2,623,267	$18,949,782
Minnesota			30,000	30,000			60,000	3,605,959
Mississippi				32,300	507,000	1,000,000	1,539,300	4,665,089
Missouri				58,500		1,157,000	1,215,500	5,401,494
Montana				9,000			9,000	2,278,357
Nebraska				18,500		250,000	268,500	1,052,699
Nevada		$10,000		2,000		50,000	62,000	211,801
New Hampshire		10,000					10,000	592,530
New Jersey				105,170			105,170	7,163,438
New Mexico				10,000		75,000	85,000	561,649
New York								44,733,741
North Carolina				30,000		750,000	780,000	4,984,996
North Dakota					66,000	440,000	506,000	1,682,020
Ohio				175,000		90,000	265,000	17,824,797
Oklahoma						500,000	500,000	6,107,919
Oregon				5,000			5,000	2,703,315
Pennsylvania						2,000,000	2,000,000	31,291,508
Rhode Island				9,000			9,000	1,383,806
South Carolina						1,000,000	1,000,000	7,146,200
South Dakota				7,000			7,000	2,012,597
Tennessee				40,000		500,000	540,000	3,175,196
Texas						1,300,000	1,300,000	11,090,220
Utah				16,000		283,000	299,000	1,491,352
Vermont								365,735
Virginia	$250,000	25,000	13,485				288,485	1,396,574
Washington				19,600		80,000	99,600	5,057,473
West Virginia				76,000		1,350,000	1,426,000	9,615,598
Wisconsin	77,325			29,999		700,000	807,324	6,854,053
Wyoming								136,445
Total	3,330,934	425,000	121,744	1,160,739	2,773,000	20,690,000	28,501,417	322,215,344
Alaska					15,000	200,000	215,000	249,629
Hawaii						400,000	400,000	660,561
Puerto Rico						700,000	700,000	1,270,201
Virgin Islands					2,500		2,500	32,737
Grand total	3,330,934	425,000	121,744	1,160,739	2,790,500	21,990,000	29,818,917	324,428,498

Buffalo Unemployment Survey, November 1933, Revised Report

A PRESS release of December 10, 1933, on the preliminary report of the fifth annual survey of unemployment in Buffalo was published in the January 1934 Monthly Labor Review. The United States Bureau of Labor Statistics was advised later that this release as issued by the New York State Department of Labor contained certain errors and was requested to call attention to the corrected figures. The following is the revised report, reproduced from the New York State Industrial Bulletin of December 1933:

The fifth annual study of unemployment in selected areas of Buffalo, N.Y., has been completed. The results published here supersede those presented in the preliminary report which was released to the press. The data indicate that in November 1933, 282 workers per thousand were unemployed as compared with 312 per thousand in 1932. Since studies of a like nature for the same areas have been made each November beginning with 1929 comparable data are now available for the past 5 years. This work is sponsored by the Buffalo Foundation in

cooperation with the State department of labor. Students of the State Teachers' College at Buffalo and the University of Buffalo made about10,000 house-to-house visits to enumerate the unemployed.

In November 1933, of the 15,729 usually employed persons able and willing to work, 9,157, or 58.2 percent, were employed full time, 4,428, or 28.2 percent, were unemployed, and 2,144, or 13.6 percent, were employed part time.

Summarizing the data for men and women able and willing to work in 1933 shows that 57.4 percent of the men and 61.4 percent of the women, were employed full time; 13.9 percent of the men and 12.5 percent of the women, were employed part time; and 28.7 percent of the men and 26.1 percent of the women, were unable to find work.

The percentage of workers fully employed and on part time is approximately 71 percent of all males able and willing to work in contrast with 74 percent of the women.

Comparing the results of the five studies of November unemployment, it was found that among persons who were able and willing to work, those who could not find employment constituted:

Men:	*Percent*	Women:	*Percent*
1929	6.2	1929	3.5
1930	17.2	1930	14.6
1931	24.3	1931	21.1
1932	32.6	1932	25.4
1933	28.7	1933	26.1

The employment status of men shows a considerable improvement over 1932 but among women unemployment has risen from 25.4 percent in 1932 to 26.1 percent in 1933.

Of men and women able and willing to work those who were employed part time in November were—

Men:	*Percent*	Women:	*Percent*
1929	7.1	1929	5.4
1930	18.6	1930	12.2
1931	23.2	1931	16.3
1932	23.4	1932	19.0
1933	13.9	1933	12.5

The proportion of men on part-time employment fell from 23.4 percent in 1932 to 13.9 percent in 1933 and among women part-time employment fell from 19 percent in 1932 to 12.5 percent in 1933.

Although the percentage of unemployment among men able and willing to work has fallen 3.9 percent since November 1932, the proportion of idle men who have been unemployed more than 52 weeks is higher, being 68 percent in 1933 and 60 percent in 1932. About four fifths of this group have been unemployed more than 2 years. It appears that the men who are being put back to work are from those groups who had been unemployed less than 52 weeks. Unemployment had lasted less than 10 weeks for 18 percent of the men, more than 10 but less than 52 weeks for 13.8 percent, and 52 weeks and over for 68.2 percent.

TABLE 1.—EMPLOYMENT STATUS OF ALL PERSONS ABLE AND WILLING TO WORK, BY SEX, 1933

Employment status	Number			Percent		
	Males	Females	Both sexes	Males	Females	Both sexes
Employed, full time	7,125	2,032	9,157	57.4	61.4	58.2
Employed, part time	1,729	415	2,144	13.9	12.5	13.6
Two thirds but less than full time	503	87	590	4.0	2.6	3.8
One half but less than two thirds	692	163	855	5.6	4.9	5.4
One third but less than one half	319	69	388	2.6	2.1	2.5
Less than one third	212	94	306	1.7	2.8	1.9
Fraction not reported	3	2	5	(1)	.1	(1)
Unemployed, able and willing to work	3,564	864	4,428	28.7	26.1	28.2
Total	12,418	3,311	15,729	100.0	100.0	100.0

[1] Less than one tenth of 1 percent.

TABLE 2.—DURATION OF UNEMPLOYMENT OF ALL MALES ABLE AND WILLING TO WORK BUT UNABLE TO FIND JOBS, 1929–33

Duration of unemployment	Number		Percent				
	1933	1932	1933	1932	1931	1930	1929
Under 2 weeks	95	55	2.7	1.4	2.6	4.3	15.8
2 and under 4 weeks	185	104	5.2	2.7	5.0	7.9	22.2
4 and under 10 weeks	359	245	10.1	6.3	12.7	21.0	30.4
10 and under 20 weeks	204	305	5.7	7.8	13.4	17.9	12.3
20 and under 30 weeks	156	419	4.4	10.7	11.7	14.3	6.2
30 and under 40 weeks	81	230	2.3	5.9	6.4	7.9	3.1
40 and under 52 weeks	52	199	1.4	5.1	5.2	5.6	.7
52 weeks and over	[1] 2,432	[1] 2,343	68.2	60.1	43.0	21.1	9.3
Total	3,564	3,900	100.0	100.0	100.0	100.0	100.0

[1] Includes 1,425 persons in 1932 and 1,928 persons in 1933 who were unemployed 104 weeks and over.

NATIONAL RECOVERY ADMINISTRATION

Work of National Labor Board and Regional Boards

A TOTAL of 1,818 cases, covering 914,000 persons, was handled by the National Labor Board and its regional boards up to the end of January 1934.[1] Cases numbering 1,628 coming before the regional boards involved 514,321 workers, the remaining 190 cases, affecting approximately 400,000 persons, being handled by the National Labor Board.

The cases handled by the National Labor Board, as of February 1, 1934, are summarized as follows:

Number of cases to date	190
Cases settled	132
Cases referred to regional boards	22
Settlements by agreement	103
Settlements by decision of Board	29
Total workers involved in cases	400,000
Number of strikes	132
Number of strikes settled	107
Cases jointly submitted for arbitration	11
Number of elections held	39
Cases pending	27

The figures show that of the 132 cases settled by the National Labor Board 103 were settled by agreement and 29 by decision of the Board. Of the 132 strikes, 107 were settled by the National Labor Board, and 11 cases were jointly submitted for arbitration.

The following table gives a statistical summary of the activities of regional labor boards:

[1] National Recovery Administration. Press release no. 3113, Feb. 4, 1934.

SUMMARY OF CASES HANDLED BY REGIONAL LABOR BOARDS TO JAN. 31, 1934

Board	Cases			Workers involved	Strikes		
	Total number	Settled	Pending		Number	Settled	Averted
Atlanta	42	26	----	9,000	10	5	7
Boston	82	26	21	18,389	19	11	14
Buffalo	31	10	14	4,197	4	4	7
Chicago	113	45	15	44,673	23	13	8
Cleveland	102	46	56	17,834	6	0	10
Detroit	136	114	22	19,013	78	78	4
Indianapolis	95	44	15	9,244	6	6	10
Los Angeles	34	19	----	28,203	8	5	5
Minneapolis-St. Paul	35	26	9	23,387	13	13	3
New York	319	285	----	97,913	224	181	33
Newark	66	39	----	12,338	16	10	13
New Orleans	53	22	31	65,000	9	9	13
Philadelphia	97	74	23	28,490	21	11	8
Pittsburgh	60	41	15	35,715	10	6	4
St. Louis	55	17	31	43,463	12	----	6
San Francisco	283	277	6	47,000	7	7	16
Seattle	25	10	15	10,462	----	----	----
Total	1,628	1,021	273	514,321	466	359	169

The regional labor boards settled 1,021 cases out of 1,628 handled and 359 strikes out of a total of 466. Six regional boards (Buffalo, Detroit, Indianapolis, Minneapolis-St. Paul, New Orleans, and San Francisco) reported settlements of all strikes coming before them. Strikes were averted in 169 instances.

National Labor Board Empowered to Supervise Elections of Employee Representatives

SUPERVISION of elections by the National Labor Board to insure employee representation in dealing with employers has been provided by Executive order.[1] This order, dated February 1, 1934, empowers the National Labor Board to supervise elections where a substantial number of employees in any establishment wish such an election to choose representatives for the purpose of collective bargaining.

The order reads as follows:

1. Whenever the National Labor Board shall determine, in such manner as it sees fit, that a substantial number (as defined in the discretion of the board) of the employees, or of any specific group of employees, of any plant or enterprise or industrial unit of any employer subject to such a code or agreement, have requested the board to conduct an election to enable them to choose representatives for the purpose of collective bargaining or other mutual aid or protection in the exercise of the rights assured to them in said section 7 (a), the board shall make the arrangements for and supervise the conduct of an election, under the exclusive control of the board and under such rules and regulations as the board shall prescribe. Thereafter the board shall publish promptly the names of those representatives who are selected by the vote of at least a majority of the em-

[1] National Recovery Administration. Press release no. 3078, Feb. 1, 1934.

ployees voting, and have been thereby designated to represent all the employees eligible to participate in such an election for the purpose of collective bargaining or other mutual aid or protection in their relations with their employer.

2. Whenever the National Labor Board shall have determined upon an investigation, or as the result of an election, that the majority of the employees of an employer, or the majority of any specific group of employees have selected their representatives in accordance with the provisions of said section 7 (a), and shall have certified the names of such representatives to their employer, and thereafter upon complaint or on its own motion, the board shall determine that such an employer has declined to recognize or to deal with said representatives, or is in any other way refusing to comply with the requirements of said section 7 (a), the board shall report its determination promptly to the Administrator for Industrial Recovery for appropriate action.

3. The powers and duties herein conferred upon the National Labor Board are in addition to, and not in derogation of, any powers and duties conferred upon such board by any other Executive order.

Regional Labor Boards Appointed

THE appointment, by the National Labor Board, of a regional labor board for Kansas City, Mo., raised the total number of such boards to 18.[1] Those previously established are in the following cities:

Atlanta, Ga.; Boston, Mass.; Buffalo, N.Y.; Chicago, Ill.; Cleveland, Ohio; Detroit, Mich.; Indianapolis, Ind.; Los Angeles, Calif.; Minneapolis-St. Paul, Minn.; Newark, N.J.; New Orleans, La.; New York, N.Y.; Philadelphia, Pa.; Pittsburgh, Pa.; St. Louis, Mo.; San Francisco, Calif.; and Seattle, Wash.

Ratification of Compact on Prison-Made Goods

A COMPACT of fair competition governing the manufacture and use of prison-made goods had been ratified by 27 States[2] at the end of January 1934—Alabama, Connecticut, Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New York, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, West Virginia, Wisconsin, and Wyoming. This compact has also been approved by the National Recovery Administrator.

Under the terms of the agreement working hours in prison shops may not exceed those established for competing private industry and the prison-made goods may not be sold below the fair current price prevailing in the markets where normally sold. In fixing prices the cost of production of the prison goods must be computed by taking

[1] National Recovery Administration. Press release no. 2794, Jan. 17, 1934.
[2] Idem, press release no. 2959, Jan. 26, 1934.

into account the same allowances for labor and overhead paid in domestic private industry on competing and comparable products.

Where prison-made goods are used solely in tax-supported institutions the terms prescribed shall not apply. Nor do they govern "the construction of public works or ways financed wholly from funds of the State or its political subdivisions."

Administration of the compact will be placed in the hands of a committee similar to the code authority provided under each code, to be known as the prison labor authority and to consist of 9 members, 6 of whom will be elected annually by representatives of the signatory States and 3 of whom will be Presidential appointees representing labor, industry, and consumers, respectively.

Summary of Permanent Codes Adopted Under National Industrial Recovery Act During January 1934

THE principal labor provisions of codes adopted during January 1934 under the National Industrial Recovery Act are shown in summary form in the following tabular analysis. This tabulation is in continuation of similar tabulations carried in the December 1933 and the January and February 1934 issues of the Monthly Labor Review.

In presenting the code provisions in this manner the intention is to supply in readily usable form the major labor provisions, i.e., those affecting the great bulk of employees in the industries covered. Under the hours provision in every instance the maximum hours permitted are shown for the industry as a whole or for factory workers, office workers, or the principal groups in service industries, where the codes provide different schedules of hours. There has been no attempt to enumerate the excepted classes of which one or more are allowed for in practically all codes, such as, under the hours provisions, executives and persons in managerial positions earning over a stated amount (usually $35), specially skilled workers, maintenance and repair crews, and workers engaged in continuous processes where spoilage of products would result from strict adherence to the hours as established. Similarly, the existence of specific classes exempted from the minimum-wage provisions is not indicated here. For complete information relative to the exempted classes under the hours and wages sections, special provisions for the control of home work, sale of prison-made goods, and studies of occupational hazards, it is necessary to refer to the original codes.

In this issue a special section at the end of the tabular analysis is devoted to amended codes that have already been printed in original form. It is intended to keep a continuing record of amendments to labor provisions as a part of the monthly summary.

Industry and date effective | Minimum wages (excluding apprentices and learners) | Maximum hours | Provisions for overtime pay | Minors of specified age excluded from em-

SUMMARY ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT DURING JANUARY 1934

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors of specified age excluded from employment
Advertising display installation trade (Feb. 9).	35 cents per hour, general. 85 cents per hour for trimmers on hourly basis and 90 cents per window installation and 50 cents per interior installation for trimmers on piecework; no trimmer to receive less in any 24 hours than equivalent of amount paid for 3 working hours.	40 per week, 8 in 24, general. 40 per week averaged over 12 weeks (installing not over 45 window installations per week), trimmers. 6 days in 7.	No provision	Under 16, general. Under 18, trimmers.
Alloy casting (Feb. 4)	40 cents per hour, general. $15 per week, office.	40 per week (48 per week during 12 weeks in any year), general. 10 percent tolerance, repair work. 56 per week, 6-day week, watchmen. 8-hour day insofar as reasonable.	do	Under 16, general. Under 18, hazardous or unhealthful occupations.
American glassware (Jan. 31).	40 cents per hour [1]	40 per week averaged over 13 weeks (maximum 48 in 1 week), general. 40 per week averaged over 4 weeks (maximum 48 in 1 week), office. 84 in 2 weeks, watchmen. 42 per week, furnacemen, gas makers, engineers, and pot fillers. If skilled employees are not available, hours may be extended for not to exceed 3 months after effective date of code.	do	Do.
Ball clay production (Jan. 29).	30 cents per hour in South, 37½ cents per hour in North, general. $15 per week, office.	40 per week averaged over 6 months (maximum 48 in 1 week), 10 in 24, general.	1½ regular rate after hours specified, emergency maintenance or repair work, and persons engaged in operating, etc., power shovels and cranes (not to exceed 10 percent of total employees).	Do.
Bedding manufacturing (Jan. 29).	30 cents per hour in South, 35 cents per hour in North, factory employees. $15 per week, employees paid on weekly or monthly basis.	40 per week (maximum 48 per week during 8 weeks in 6 months), general. 10 percent tolerance, firemen, etc. 48 per week averaged over 2 weeks (maximum 56 in 1 week), watchmen.	No provision	Under 16, general. Under 21, hazardous or unhealthful occupations.
Card clothing (Jan. 28)	40 cents per hour, general. $15 per week, office.	40 per week, 8 per day (in peak periods 48 per week during 6 weeks in 6 months), general. 10 percent tolerance (but not to exceed 44 per week during 6 weeks in 6 months), maintenance, etc., employees. 40 per week averaged over 1 month (maximum 48 in 1 week), office. 56 per week, 6 days in 7, watchmen.	1½ regular rate after 8 hours per day and 40 per week, general.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Carpet and rug manufacturing (Jan. 14).	30 cents per hour, southern section; 35 cents per hour, northern section.	40 per week, 8 per day (48 per week, 10 in 24, during 6 weeks in 6 months), general. 10 percent tolerance, engineers, repair crews, etc.	1½ regular rate after hours specified.	Under 16.

[1] Unless rate was lower on July 15, 1929, but in no case less than 30 cents an hour.

TABULAR ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT DURING JANUARY 1934—Continued

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors of specified age excluded from employment
Chewing gum manufacturing (Feb. 9).	32½–35 cents per hour for females and 37½–40 cents per hour for males, according to population, general. $14–$15 per week, according to population, office.	40 per week, 10 per day (8 per week additional during 8 weeks in 6 months provided weekly average does not exceed 40), general. 44 per week, firemen, etc. 60 per week, watchmen. 6 days in 7.	1⅓ regular rate after hours specified.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Coin-operated machine manufacturing (Feb. 2).	35 cents per hour in South, 40 cents per hour in North, processing. $14–$15 per week, according to population, others.	40 per week, 8 in 24, general. In peak periods, emergency, etc., 32 additional in any 6 months (maximum 48 in 1 week), employees engaged in processing; 48 additional in any 6 months (maximum 48 in 1 week), other employees. Maximum in any 2 weeks, 96. 56 per week, watchmen.	1½ regular rate after hours specified, general. 1½ regular rate after 56 hours, watchmen.	Do.
Construction (Mar. 2)	40 cents per hour, unskilled labor. $12–$15 per week, according to population, office.	40 per week, 8 in 24 (maximum 48 in 1 week, in remote localities, to make up time lost from bad weather, and when sufficient qualified help is not available), general. 40 per week averaged over 4 weeks, office.	No provision	Do.
Construction machinery distributing (Feb. 5).	40 cents per hour, general. $15 per week, clerical.	40 per week, 8 per day, 6-day week (in inventory and peak periods 48 per week during 3 weeks in 6 months), general. 56 per week, 6 days in 7, watchmen. 48 per week, outside delivery service, plant maintenance, outside repair, etc.	1⅓ regular rate after 40 hours, outside delivery service, plant maintenance, outside repairs, etc.	Do.
Cooking and heating appliance manufacturing (Feb. 12).	27½ cents per hour in South, 35 cents per hour for females and 40 cents per hour for males elsewhere, general. $12–$15 per week, according to population, office.	40 per week (48 per week during 10 weeks in 12 months), 8 in 24, general. 10 percent tolerance, emergency work. 1 per day tolerance, shipping crews, foundry service men (when necessary). 36 additional in 2 weeks or 3 per day, office employees during inventory. 56 per week, 6 days in 7, watchmen.	1½ regular rate after hours specified.	Do.
Cork (Jan. 22)	30 cents per hour for females, 38 cents per hour for males, hourly employees. $14 per week, office, service, or sales employees (except outside salesmen).	40 per week averaged over 3 months (maximum 48 in 1 week), general. 44 per week, emergency repair, firemen, engineers, truck drivers, and shipping crews. 56 per week, 6-day week, watchmen.	1½ regular rate after 44 hours, emergency repair, firemen, engineers, truck drivers, and shipping crews. 1½ regular rate after 40 hours, employees with less than 3 months' service whose hours average over 40 per week.	Do.
Dental laboratory (Feb. 1)	40 cents per hour, general. $14 per week, office. $10 per week, messengers not engaged in processing.	44 per week in 1-man laboratories, 40 per week, 8 per day in other laboratories (25 additional in each half of calendar year, maximum 48 in 1 week), processing employees. 44 per week, 9 per day, office or other nonprocessing employees. Operation of dental laboratories limited to 52 per	1⅓ regular rate after 40 hours (overtime not to exceed 25 hours in each half of calendar year), processing employees.	Do.

Dental laboratory (Feb. 1)	40 cents per hour, general. $14 per week, office. $10 per week, messengers not engaged in processing.	44 per week in 1-man laboratories, 40 per week, 8 per day in other laboratories (25 additional in each half of calendar year, maximum 48 in 1 week), processing employees. 44 per week, 9 per day, office or other nonprocessing employees. Operation of dental laboratories limited to 52 per week (between 7 a.m. and 7 p.m., Monday to Friday, inclusive, or 1:30 p.m. Saturday).	1½ regular rate after 40 hours (overtime not to exceed 25 hours in each half of calendar year), processing employees.	Do.
Drapery and upholstery trimming (Jan. 26).	32½ cents per hour	40 per week, 8 in 24, general. 10 percent tolerance, repair-shop crews, engineers, etc. 40 per week averaged over 3 months (maximum 48 in 1 week), 8 in 24, office. 56 per week, watchmen. Operation of productive machinery limited to 2 shifts of 40 hours per week.	1½ regular rate after hours specified, emergency maintenance and repair.	Under 16.
Envelop (Feb. 5)	37 cents per hour in southern zone, 40 cents per hour in northern zone, laborers, mechanical workers, and artisans. $15 per week in southern zone, $16 per week in northern zone, others.	35 per week (tolerance of 5 additional), laborers, mechanical workers, and artisans. 112 in 2 weeks, 6-day week, watchmen who also tend fires. 192 in 4 weeks, chauffeurs, truckmen. 168 in 4 weeks, engineers and firemen. 40 per week averaged over 13 weeks (maximum 48 in 1 week), others. Operation of manufacturing plants limited to 40 per week averaged over 6 months.	1½ regular rate after 9 hours per day and 35 per week, laborers, mechanical workers, and artisans. 1½ regular rate after 9½ hours per day and 48 per week, chauffeurs, truckmen. 1½ regular rate after 9 hours per day and 48 per week, engineers and firemen. 1½ regular rate after hours specified, emergency work.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Fan and blower (Feb. 12)	40 cents per hour, general. $15 per week, office.	40 per week (48 per week during 6 weeks in 6 months), 8 in 24, general. 44 per week (48 per week during 6 weeks in 6 months), 9 per day, maintenance and repair, truckmen, etc., 56 per week, watchmen. 40 per week averaged over 5 weeks (maximum 48 in 1 week), office. 6 days in 7.	1½ regular rate after 8 hours per day and 40 per week, general, maintenance and repair.	Do.
Feldspar (Jan. 29)	25 cents per hour in South, 30 cents per hour in North, mining operations. 30 cents per hour in South, 35 cents per hour in North, milling or grinding operations. $13.50 per week, office.	40 per week averaged over 3 months (maximum 48 in 1 week), mining operations. 40 per week, 8 per day, 6 days in 7, milling or grinding operations. 40 per week, 10 in 24, office.	1½ regular rate after 8 hours in 24, emergency maintenance or repair work.	Do.
Furniture and floor wax and polish (Feb. 2).	35 cents per hour, employees on light tasks (wrapping, etc.). 40 cents per hour, others.	40 per week averaged over 3 months (maximum 48 in 1 week), general. 44 per week averaged over 3 months (maximum 48 in 1 week), employees on automotive or horsedrawn passenger service, etc. 48 per week, engineers, firemen, etc. 56 per week, watchmen. 6-day week.	1½ regular rate after 8 hours in 24 and 40 per week, employees on emergency maintenance and repair.	Do.
Light sewing industry, except garments (Feb. 2).	30 cents per hour, fabric auto equipment, Southern States; 32½ cents per hour, otherwise.	40 per week averaged over 6 months (maximum 48 per week during 6 weeks in 6 months), 8 in 24, general. 40 per week averaged over 2 months (maximum 48 in 1 week), 8 in 24, office. 44 per week, repair-shop crews, firemen, etc. Operation limited to 2 shifts of 40 hours per week.	1½ regular rate after 40 hours, general. 1½ regular rate, emergency maintenance or repair.	Under 16.

TABULAR ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT DURING JANUARY 1934—Continued

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors of specified age excluded from employment
Macaroni (Feb. 8)	35 cents per hour, unskilled men (not to exceed 10 percent of factory workers), watchmen, and female employees. 55 cents per hour, mixers, kneaders, etc. 45 cents per hour, other males. $16 per week, office.	40 per week (in peak periods 48 per week during 8 weeks in year), 8 per day, general. 48 per week, chauffeurs and deliverymen. 56 per week, watchmen. 44 per week, maintenance men, etc.	1½ regular rate for hours after 40 per week, general. 1½ regular rate after hours specified, emergency maintenance and repair.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Marine auxiliary machinery (Feb. 9).	40 cents per hour, production and labor operations. $15 per week, others.	40 per week, 8 in 24, general. 48 per week, watchmen.	1½ regular rate after 8 hours in 24 and 40 per week, and for time worked on Sundays and legal holidays, emergency work.	Do.
Merchandise warehousing trade (Feb. 10).	27½ to 40 cents per hour, according to population and region, warehouse labor. $13.50 to $15, according to population, office employees on weekly basis; 40 cents per hour, other office employees.	45 per week, 8 in 24, general. 54 per week, 6 days in 7, watchmen.	1½ regular rate after 8 hours per day and 45 per week, emergency work.	Under 16.
Metal hat die and wood hat block (Jan. 29).	40 cents per hour, general. $14–$15 per week, according to population, office.	40 per week, 8 in 24	No provision	Under 16, general. Under 18, hazardous or unhealthful occupations.
Metal window (Jan. 22)	40 cents per hour, general. $15 per week, office.	40 per week (7-day period), 8 in 24, 6 days in 7 (with tolerance of 2 in any 24 for emergency manufacturing, provided average is 40 in 7-day period), general. 40 per week (7-day period), 8 in 24, 12 days in 14, office. 40 per week (7-day period), 8 in 24, 5 days in 7, installation work. 56 per week, 6 days in 7, watchmen.	1½ regular rate after 8 hours in 24 or 40 in 7 days (overtime not to exceed 6 hours in 7 days), emergency maintenance or repair work.	Do.
Musical merchandise manufacturing (Jan. 29).	32 cents per hour for females, 35 cents per hour for males, general. $15 per week, office.	40 per week averaged over 4 weeks (80 additional during 12 months, maximum 48 in 1 week), general. 40 per week (in inventory periods, 48 per week during 3 weeks in 6 months), office. 48 per week, service men. 42 per week averaged over 2 weeks (36 and 48 alternately), watchmen and firemen; or 10 percent tolerance over general provisions, firemen.	1⅓ regular rate after 40 hours, general, and office.	Do.
Paper bag manufacturing (Feb. 5).	33 cents per hour for females and 38 cents per hour for males in northern zone, 30 cents per hour for females and 35 cents per hour for males in central zone, 30 cents per hour in southern zone, laborers, mechanical workers, and artisans.[2] $12–$15 per week, according to population, others.	40 per week averaged over 13 weeks (maximum 48 in 1 week), 8 per day, laborers, mechanical workers, and artisans. 56 per week, 8 per day, watchmen. 168 in 4 weeks (maximum 48 in 1 week), 10 per day, chauffeurs, truckmen, firemen, etc. 40 per week averaged over any calendar year (maximum 48 per week in any 13 weeks), others.	1⅓ regular rate after 8 hours per day, laborers, mechanical workers, and artisans.	Do.
Picture molding and picture frame (Jan. 29).	32½ cents per hour for 1 year and 37½ cents per hour thereafter in North and 90 percent of foregoing rates in 7 Southern States, general. $12–$15 per week, according to population, office.	40 per week, 8 in 24 (in peak periods 40 per week averaged over 4 weeks, maximum 48 in 1 week), general. 56 per week, 6-day week, watchmen. 48 per week, outside deliverymen, firemen, etc. (not to exceed 10 percent of total employees). 40 per week averaged over 4 weeks (maximum	1⅓ regular rate after 8 hours per day and 40 per week, general and emergency. 1⅓ regular rate after 40 hours, outside deliverymen, firemen,	Do.

Picture molding and picture frame (Jan. 29).	32½ cents per hour for 1 year and 37½ cents per hour thereafter in North and 90 percent of foregoing rates in 7 Southern States, general. $12–$15 per week, according to population, office.	40 per week, 8 in 24 (in peak periods 40 per week averaged over 4 weeks, maximum 48 in 1 week), general. 56 per week, 6-day week, watchmen. 48 per week, outside deliverymen, firemen, etc. (not to exceed 10 percent of total employees). 40 per week averaged over 4 weeks (maximum 48 in 1 week), office.	1½ regular rate after 8 hours per day and 40 per week, general and emergency. 1½ regular rate after 40 hours, outside deliverymen, firemen, etc.	Do.
Pipe organ (Jan. 27)	40 cents per hour, factory employees. $14 per week, others.	40 per week (48 per week during 12 weeks in 12 months), factory employees. 40 per week (48 per week during 3 weeks in 6 months), inventory and statistical employees; 40 per week, other office employees. 42 per week averaged over 2 weeks (36 and 48 alternately), watchmen. 48 per week, outside installers and outside service men.	1½ regular rate after 40 hours, factory employees. 1½ regular rate after 48 hours, outside installers and outside service men in emergencies.	Do.
Plumbing fixtures (Jan. 16).	35 cents per hour in South, 40 cents per hour elsewhere, males over 21; 35 cents per hour, females over 21; 32 cents per hour, employees under 21. $15 per week, office.	40 per week, 8 in 24, 6 days in 7	1½ regular rate after hours specified, emergency work.	Do.
Porcelain breakfast furniture assembling (Feb. 12).	36 cents per hour in South, 40 cents per hour elsewhere.	40 per week averaged over 8 weeks (maximum 48 in 1 week), 8 in 24, general. 10 percent tolerance, firemen, emergency maintenance, etc. 42½ per week averaged over 2 weeks (85 in 2 weeks), night watchmen and night firemen. 40 per week averaged over 8 weeks (maximum 45 in 1 week), office. 6-day week.	1½ regular rate after 8 hours per day and 40 per week.	Do.
Powder puff (Jan. 27)	32½ cents per hour	40 per week, 8 in 24, 24 days in 28	1⅓ regular rate after 8 hours in 24 and 40 per week (overtime not to exceed 100 hours per year, or 10 hours per week, or 2 hours in 24), males over 18.	Do.
Railway brass car and locomotive journal bearings and castings manufacturing (Feb. 12).	32 cents per hour in South, 40 cents per hour in North, general. $15 per week, office.	40 per week (48 per week during 4 weeks in 26 weeks), 8 in 24, general. 1 per day above maximum, melters, engineers, and firemen. 56 per week, watchmen.	1½ regular rate after 8 hours in 24 and 40 per week.	Under 18.
Railway safety appliance (Jan. 29).	35 cents per hour for females, 40 cents per hour for males, processing or installation or labor operations directly incident thereto. $15 per week, others.	40 per week averaged over 4 months, 8 per day, general. 56 per week, watchmen.	1½ regular rate after 8 hours per day and 40 per week, processing or installation or labor operations directly incident thereto.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Raw peanut milling (Jan. 17).	15 cents per hour, light work. 22 cents per hour, shipping, etc. 27 cents per hour, chauffeurs, etc. 35 cents per hour, picking-room foremen, etc. $14 per week, office.	40 per week, 8 per day, general. 44 per week. 8 per day, office. 56 per week, watchmen. 48 per week, chauffeurs, deliverymen, receiving and shipping crews, firemen, etc.	1⅓ regular rate after hours specified. 1½ regular rate for work on Sundays and legal holidays, employees except watchmen.	Do.

[1] Unless rate was lower on July 15, 1929, but in no case less than 90 percent of code rates.

TABULAR ANALYSIS OF LABOR PROVISIONS IN CODES ADOPTED UNDER NATIONAL INDUSTRIAL RECOVERY ACT DURING JANUARY 1934—Continued

Industry and date effective	Minimum wages (excluding apprentices and learners)	Maximum hours	Provisions for overtime pay	Minors of specified age excluded from employment
Retail farm equipment trade (Jan. 22).	Rate as of June 1, 1933, plus 20 percent, but wage not to exceed $9 to $14 per week in South, $10 to $15 elsewhere, according to store hours and population.	According to store hours, 40 per week, 8 per day, or 44 per week, 9 per day, or 48 per week, 10 per day (in peak periods—not to exceed 2 weeks in first 6 months and 3 weeks in second 6 months of year—48 per week, 9 per day, or 52 per week, 9½ per day, or 56 per week, 10 per day, respectively), employees of stores. 40 per week, 8 per day, others. 1 extra hour on 1 day per week, provided average for week does not exceed maximum provided. 6-day week.	1½ regular rate after 6-hour tolerance, maintenance and outside service employees.	Under 16; except that minors 14 and 15 may be employed 3 hours per day, 6 days per week, or for 1 day of 8 hours per week.
Robe and allied products (Jan. 29).	32½ cents per hour	40 per week, 8 in 24, 5 days in 7, general. 40 per week averaged over 1 year, 8 in 24 (48 per week during 16 weeks in any calendar year), office, shipping or stock-room employees. 56 per week, watchmen. Operation of machinery limited to 1 shift of 40 hours.	No provision	Under 16.
Sanitary napkin and cleansing tissue (Jan. 19).	33⅓ cents per hour for females, 41⅔ cents per hour for males, general. $14–$15 per week, according to population, office.	40 per week, 8 in 24, general. 40 per week averaged over 3 months (maximum 44 in 1 week), office.	1½ regular rate after 8 hours per day and 40 per week, emergency work.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Slate (Feb. 1)	30 cents per hour in Virginia, 35 cents per hour, elsewhere, general. $15 per week, watchmen.	40 per week averaged over 6 months (maximum 45 in 1 week), 9 per day, 6 days in 7, general. 56 per week, slate loaders, shipping clerks, firemen, etc.	1½ regular rate after 9 hours per day and 45 per week, emergency maintenance or repair.	Under 18.
Slide fastener (Feb. 12)	37½ cents per hour for females and 40 cents per hour for males, factory and other employees. $14–$15 per week, according to population, office.	40 per week averaged over 4 weeks (maximum 48 in 1 week), office. 40 per week (in peak periods 48 in 1 week but not over 96 additional in 6 months), others. 40 per week averaged over 26 weeks, highly skilled workers (not to exceed 15 percent of total employees) and those on emergency work. 42 per week averaged over 13 weeks, watchmen.	1½ regular rate after 8 hours per day and 40 per week, all except office. 1½ regular rate after 40 hours per week, emergency work, etc.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Slit fabric manufacturing (Jan. 29).	$12 per week in South, $13 per week in North.	40 per week, 8 in 24, general. 44 per week, chauffeurs, shipping clerks, and outside errand boys. Operation limited to 1 shift per day.	1½ regular rate (overtime not to exceed 25 hours in 6 months, 1 hour per day, or 5 hours per week).	Do.
Smoking pipe manufacturing (Feb. 2).	30 cents per hour, employees engaged in wrapping and branding pipes. 35 cents per hour, others.	40 per week, 8 in 24, general. 42½ per week, office. 48 per week (40 per week, June through September), engineers and firemen. 48 per week, shipping and packing employees. 42 per week averaged over 2 weeks (36 and 48 alternately), watchmen.	1½ regular rate after 40 hours, highly skilled workers and emergency repair crews.	Do.
	week, according to population, office.	aged over 8 weeks (maximum 48 in 1 week), office, repair, engineers, cleaners, etc. 56 per week averaged over 2 weeks, watchmen. 42 per week, firemen. 24 days in 28.	hours, repair, engineers, cleaners, etc. 1½ regular rate after hours specified, emergency maintenance and repair.	Do.
Textile processing (Feb. 5)	30 cents per hour in South and 32½ cents	40 per week averaged over 12 months (48 per week	No provision	Under 16, general. Un-

	week, according to population, office.	aged over 8 weeks (maximum 48 in 1 week), office, repair, engineers, cleaners, etc. 56 per week averaged over 2 weeks, watchmen. 42 per week, firemen. 24 days in 28.	hours, repair, engineers, cleaners, etc. 1½ regular rate after hours specified, emergency maintenance and repair.	Do.
Textile processing (Feb. 5).	30 cents per hour in South and 32½ cents per hour elsewhere, cotton and rayon yarn processing; 32½ cents per hour in South and 35 cents per hour elsewhere, other processing.	40 per week averaged over 12 months (48 per week during 20 weeks), general. 4 per week tolerance, supervisors, receiving and shipping crews, etc. 56 per week, firemen and watchmen. Cone winding machines used in producing cotton mercerized yarn subject to machine limitations of cotton textile code.	No provision	Under 16, general. Under 18, wet processing.
Venetian blind (Feb. 5)	32½ cents per hour for females, 35 cents per hour for males, general. $14–$15 per week, according to population, office.	40 per week averaged over 12 weeks (maximum 48 in 1 week), 8 per day, general. 40 per week averaged over 4 weeks (maximum 46 in 1 week), 9 per day, office. 84 in 2 weeks (maximum 48 in 1 week), engineers, firemen, watchmen.	1½ regular rate after 40 hours, general, and office. 1½ regular rate after 8 hours per day and 40 per week, emergency, maintenance, etc.	Under 16, general, Under 18, hazardous or unhealthful occupations.
Wet mop manufacturing (Feb. 2).	30 cents per hour in South, 32½ cents per hour elsewhere.	40 per week, 8 in 24, general. 44 per week, repair-shop crews, firemen, etc. 48 per week, truckmen. 56 per week, watchmen. Operation of productive machinery limited to 2 shifts of 40 hours per week.	1½ regular rate after hours specified, emergency maintenance or repair.	Do.
Wholesale food and grocery trade (Jan. 11).	[3]	[3]	[3]	[3].
Wholesaling or distributing trade (Jan. 22).	$13–$14 per week in South, $14–$15 per week elsewhere, according to population.	40 per week, 8 per day, 6-day week (1 extra on 1 day per week provided average is not exceeded), general. 48 per week, outside delivery, maintenance, outside repair service, and installation. 56 per week, 6 days in 7, watchmen.	1⅓ regular rate after hours specified.	Under 16, general. Under 18, hazardous occupations.
Wool trade (Jan. 29)	37½ cents per hour	40 per week, general. 40 per week averaged over 6 months (maximum 48 in 1 week), office. 6-day week, watchmen.	1⅓ regular rate after hours specified, emergency work.	Under 16.

Amended codes [4]

Cotton cloth glove manufacturing (Jan. 8, 1934).	30–40 cents per hour, according to occupation, general. *16–43 cents per dozen, according to kind of sewing, glove sewing (piecework).* $12–$15 per week, according to age, office.	40 per week, 8 in 24 (tolerance of 10 percent, July 1–November 1, provided average for calendar year is 40 per week), general. 54 per week, 6-day week, watchmen. 48 per week, drivers.	1⅓ regular rate after maximum hours specified, emergency repair, etc.	Under 16, general. Under 18, hazardous or unhealthful occupations.
Cotton-textile and rayon weaving (July 17, 25, 1933).	$12 per week in South, $13 per week in North, general. *75 percent thereof, outside employees and cleaners.*	40 per week, general. *44 per week, outside employees and cleaners.* Operation limited to 2 shifts.	No general provision. 1½ regular rate, repair-shop crews, etc.	Do.
Wool textile (Aug. 14, 1933).	32½ cents per hour, South; 35 cents per hour, North.	40 per week, general. *48 per week, office employees.* Operation limited to 2 shifts.	No provision	Do.

[3] No change from labor provisions approved Nov. 15, 1933.

[4] Amendments given in italics.

PRODUCTIVITY OF LABOR AND INDUSTRY

Employment, Production, and Productivity in the Anthracite Industry, 1927–32

A FURTHER recession in 1932 in production, capacity in operation, days worked, men employed and output per man per year, and an increase in output per man per day and quantity of coal mined by cutting machines and stripping is shown in the annual report of the Bureau of Mines [1] covering the anthracite industry in 1932. The following table shows the salient statistics of the Pennsylvania anthracite industry from 1927 to 1932, inclusive.

SALIENT STATISTICS OF THE PENNSYLVANIA ANTHRACITE INDUSTRY, 1927–32

Item	1927	1928	1929	1930	1931	1932
Production.....net tons..	68, 465, 537	64, 551, 767	64, 203, 900	59, 839, 838	51, 141, 397	42, 994, 20
Capacity in operation (calculated) net tons..	108, 000, 000	105, 000, 000	100, 000, 000	101, 000, 000	100, 000, 000	94, 000, 00
Average number of days worked.....	225	217	225	208	181	16
Average number of men employed...	165, 259	160, 681	151, 501	150, 804	139, 431	121, 24
Output per man per day...net tons..	2. 15	2. 17	2. 17	2. 21	2. 37	2. 5
Output per man per year.....do....	485	469	487	460	428	41
Quantity mined by cutting machines net tons..	1, 171, 888	1, 289, 809	1, 159, 910	1, 410, 123	1, 587, 265	1, 674, 23
Quantity mined by stripping..do....	2, 153, 156	2, 422, 924	1, 911, 766	2, 536, 288	3, 813, 237	3, 980, 97

In all instances the declines occurring in 1932 represent a continuation of a trend established during 1928. The number of tons of coal produced and the average number of men employed have dropped yearly without exception, but the statistics of capacity in operation, days worked, and output per man per year show gains in either 1929 or 1930, with a continuing loss thereafter.

The rise in output per man per day that was evident in 1931 was carried farther in 1932. At the same time the use of machine cutting and strip mining increased, both of these factors in conjunction with operation of the more productive mines during a period of slackened demand having doubtless contributed to the increased productivity in the anthracite industry.

[1] U.S. Department of Commerce. Bureau of Mines. Coal Division. Pennsylvania anthracite coal tables, 1932, by F. G. Tryon and H. L. Bennit. Washington, D.C. October 16, 1933. (Mimeographed.)

CHILD LABOR

Employment of Children under 14 in England

THE new English law concerning the employment of children and young people (see Monthly Labor Review, September 1932 p. 537) became effective by official order, on November 1, 1933. It provides, among other things, that no child under 14 shall be employed before the close of school hours on any day when he is required to attend school; it permits local authorities to modify this, however, by formal action so as to permit the employment of a child before school hours on a school day for not more than 1 hour. In anticipation of the coming into effect of the new act, local education authorities were requested in 1931 to furnish particulars of the number of children under 14 employed in various occupations in their respective districts, distinguishing those who were employed before school hours. The following table, published in the Ministry of Labor Gazette for November 1933 is based on data sent in by 298 of the 318 local authorities from whom it was requested.

EMPLOYMENT OF CHILDREN UNDER 14 IN ENGLAND

Occupation	Aged 12–13		Aged 13–14		Total	Employed before school
	Boys	Girls	Boys	Girls		
Delivery of—						
Newspapers	10,152	394	18,187	605	29,338	22,568
Milk	1,727	243	2,442	242	4,654	2,653
Goods and parcels	5,403	416	9,902	431	16,152	1,211
In shops	727	127	1,048	227	2,129	194
Industrial home work	192	152	186	122	652	88
Nursing and domestic work	241	1,317	395	1,505	3,458	700
Agricultural work	1,387	348	1,790	349	3,874	658
Other occupations	706	161	980	230	2,077	75
Unclassified					974	184
Total	20,535	3,158	34,930	3,711	63,308	28,331

PENSIONS AND INSURANCE

Care of the Aged in New York

NEW YORK State makes provision for the care of its needy aged people in several ways—through a State-wide, State-aided pension system, and through public and private homes. Data on the various methods of care for the aged practiced in New York are given in the annual report of the Board of Social Welfare of that State, for the year ending June 30, 1932, from which the following information is taken.

Old-age pensions.—The New York old-age pension law, under which payments began January 1, 1931, provides for grants in aid to citizens 70 years of age or over who are not in need of institutional care. No maximum allowance is set by the law, the welfare board being merely directed to "provide adequately", giving due consideration to the individual circumstances. There is no property qualification, but the State board has adopted regulations which allow the payment of old-age relief to (1) persons who own a home which brings in no income and which has no borrowing value, provided the carrying charges of the property do not exceed a reasonable rental; (2) persons who have money or negotiable securities not in excess of the cost of last illness and burial, provided such expenses cannot be met from any other source and that the amount reserved for this purpose does not exceed $250; and (3) persons carrying insurance, provided that if the policy is in excess of the expenses of last illness and burial, the excess shall be used to repay the amount of old-age relief received.

During the year 1931–32 the number of pensioners rose from 40,539 to 51,225 and the monthly disbursement from $1,090,847 to $1,295,845. At the same time the average monthly allowance fell steadily by a few cents each month, from $26.91 in July 1931 to $24.78 in May 1932, rising to $25.30 in June 1932. A standard budget of minimum expenses was made, on the basis of a cost-of-living study, the application of which resulted in "a marked reduction" in the allowances in many cases. The report ascribes the rise in the number of pensioners to an actual increase in the total number of aged in the State population, lessened opportunities for their employment, and the

continuance of the depression. The board estimates that about one third of the applications are a direct result of the conditions resulting from the depression. The report further points out that the possibility of the beneficiaries ever again becoming self-sustaining lessens as the depression continues.

From September 1930, when the first applications were received, through June 1932, a total of 97,053 applications were filed. Withdrawal of application or death of the applicant before the claim was acted upon reduced this number to 93,244; of these, 87,813 had been decided by June 30, 1932, grants having been made in 58,456 cases, while 29,357 (33.4 percent) were denied. Of those granted, 7,231 were later discontinued because of death, new conditions, etc. The total number of deaths among the pensioners was 6,119, of which 5,001 took place in 1931–32.

The proportion that the pensioners form of population ranged from 0.2 percent in Erie, Nassau, and Westchester Counties to 1.2 percent in Schuyler and Tioga Counties.

The total amount disbursed in old-age relief during the fiscal year was $14,559,155. Refunds from pensioners or their relatives amounted to $80,208, making a net expenditure of $14,478,947, of which half was reimbursed to the city or county welfare districts by the State.

The old-age security law, it is reported, has checked the rise of the population in the 62 public homes in the State. It has, however, had no very great effect in removing persons already in these homes. Altogether 569 persons left these institutions in order to receive the pension, but of these 99 returned. There were 377 others who were denied allowances because of their mental or physical condition and were sent to public homes, while 511 others had their allowances discontinued for the same reason, being sent to a public institution.

Public homes.—The number of residents in public homes rose from 8,206 in 1922 to 10,975 in 1929, and to 13,062 in 1931. Of these persons, 50.7 percent (end of 1931) were from 50 to 70 years of age and 38.4 percent were 70 years and over.

The average cost of care per inmate in 1932 was $323 per year, or 88 cents per day.

Private homes for aged.—In addition to the public homes mentioned above, there are 16 private homes and 4 other institutions caring for dependent adults which receive State aid. There are also some 180 homes and 50 other institutions for aged which do not receive public aid but are supervised by the State board of social welfare. The board estimates that the private homes have a population of 13,125 persons and a monthly turn-over of more than 200 persons.

Certain statistical data are given for the 16 private homes receiving State aid, as follows:

Average daily number of inmates	1,898
Value of property owned	$5,197,180
Receipts, 1931–32	$1,061,881
Total disbursements, 1931–32	$1,084,144
Maintenance expenses, 1931–32:	
Salaries, wages, etc	$285,985
Food, ice, and water	196,326
Clothing	5,274
Fuel, light, and power	74,310
Medicines and medical equipment and supplies	38,047
Office expenses	33,841
Household furnishings and equipment	31,554
Farm and garden	9,761
Transportation, etc	2,884
Insurance and taxes	18,142
Repairs	38,467
Other	8,799
Total	743,390

English Expenditures on Public Social Services

THE British Government has recently issued a paper giving data concerning expenditures for certain forms of social service in England and Wales and in Scotland for the financial year 1931 (or the latest available financial year) and in regard to a number of the services, for 1932 also, these latter amounts being partly estimated. The Ministry of Labor Gazette gives, in its issue for December 1933 (p. 439), a summary of the expenditures (other than out of loans for capital purposes) for a number of the more important forms of public service. The funds from which these expenditures are made come from a variety of sources, in addition to Government grants.

The term "expenditure" as used in the return is restricted to expenditure from (i) local rates, (ii) Parliamentary votes and grants, and (iii) other receipts (not being receipts from loans for capital purposes) accounted for by, or to, Government departments and local authorities. The "other receipts" include, for example, in the case of education, revenue from endowments, voluntary contributions, teachers' superannuation contributions, etc.; in the case of health insurance, unemployment insurance, and widows', orphans', and old-age contributory pensions, the contributions of employers and employed; in the case of housing, rents; etc.

The amounts spent in the financial year 1931, and the actual or estimated amounts for the financial year 1932, are shown in the following table:

EXPENDITURES ON PUBLIC SOCIAL SERVICES IN GREAT BRITAIN, 1931 AND 1932

[Conversions into United States currency on basis of pound at par = $4.8665. Average exchange rate for 1931 was $4.535 and for 1932 was $3.506]

England and Wales

Expenditure under—	Financial year 1931		Financial year 1932 (estimated)	
	English currency	United States currency	English currency	United States currency
Unemployment insurance acts:				
Insurance benefits, etc	£78,476,000	$381,903,454	£56,546,000	$275,181,109
Transitional benefit	27,161,000	132,179,007	45,057,000	219,269,891
National insurance (health) acts	33,507,000	163,061,816	33,550,000	163,271,075
Widows', orphans', and old-age contributory pension acts	35,412,000	172,332,498	36,425,000	177,262,263
Old-age pension acts	34,351,000	167,169,142	36,084,000	175,602,786
War pensions acts and Ministry of Pensions act	42,272,000	205,716,688	40,120,000	195,243,980
Education acts	89,623,000	436,150,330	87,673,000	426,660,655
Acts relating to reformatory and industrial schools	522,000	2,540,313	515,000	2,506,248
Public health acts so far as they relate to—				
Hospitals and treatment of disease	9,170,000	44,625,805	----------	----------
Maternity and child welfare work	2,889,000	14,059,319	----------	----------
Housing of the working classes acts	35,226,000	171,427,329	----------	----------
Acts relating to the relief of the poor	36,879,000	179,471,654	----------	----------
Lunacy acts	2,549,000	12,404,709	----------	----------
Mental deficiency acts	1,817,000	8,842,431	----------	----------
Totals	429,854,000	2,091,884,491	----------	----------

Scotland

Unemployment insurance acts:				
Insurance benefit, etc	£11,959,000	$58,198,474	£7,364,000	$35,836,906
Transitional benefit	5,214,000	25,373,931	8,729,000	42,479,679
National insurance (health) acts	3,952,000	19,232,408	3,900,000	18,979,350
Widows', orphans', and old-age contributory pension acts	4,328,000	21,062,212	4,428,000	21,548,862
Old-age pension acts	4,269,000	20,775,089	4,436,000	21,587,794
War pensions acts and Ministry of Pensions act	4,715,000	22,945,548	4,479,000	21,797,054
Education acts	13,643,000	66,393,660	13,475,000	65,576,088
Acts relating to reformatory and industrial schools	129,000	627,779	125,000	608,313
Public health acts so far as they relate to—				
Hospitals and treatment of disease	1,386,000	6,744,969	1,397,000	6,798,501
Maternity and child welfare work	319,000	1,552,414	299,000	1,455,084
Housing of the working classes acts	4,989,000	24,278,969	5,213,000	25,369,065
Acts relating to the relief of the poor	4,323,000	21,037,880	5,174,000	25,179,271
Lunacy acts Mental deficiency acts	1,271,000	6,185,322	1,246,000	6,063,659
Totals	60,497,000	294,408,651	60,265,000	293,279,623

HEALTH AND INDUSTRIAL HYGIENE

Medical Service of Chicago Truck Drivers' and Chauffeurs' Union

A MEDICAL insurance plan providing complete medical service which is said to have benefited both workers and employers through improved health, greater efficiency, and the removal from the workers of the financial worry of sickness, and reduction in lost time has been provided for members of the Chicago Truck Drivers' and Chauffeurs' Union, Local 705, and their families since 1930. In April of that year a medical center with specialists in charge of the different departments and with complete and modern equipment was placed in operation, according to a pamphlet, entitled "A Humanitarian Service", which has been issued recently by the union.

The clinic provides full medical care, including minor and major operations and complete hospitalization where it is needed. The medical insurance plan under which this service is rendered is financed by a yearly fee of $10 for each member and of $1 per year each for members' wives and children. The opportunity to secure medical care at these rates has been accepted by so large a proportion of the membership that at present 15,000 persons receive medical treatment each year and approximately 1,600 more are taken care of at the hospital.

The center occupies 10 rooms in a central location and has facilities to handle from 75 to 100 patients daily. The staff consists of 4 physicians and 2 graduate nurses and the center is equipped with modern X-ray apparatus, equipment for making basal metabolism and other tests, and has a completely equipped operating room. The type of treatment given at the office, which is open from 9 a.m. to 8 p.m., includes surgical dressings, light and heat treatments, basal metabolism tests, X-ray treatments and pictures, the giving of preventive serums for contagions, reduction of fractures, examinations, etc. A maternity service is also maintained, so that complete care is given before and after childbirth, with regular supervision of the care of infants. In cases which require hospitalization, through arrangement with one of the city hospitals, patients are given hospital care under the attendance of one of the physicians of the center without additional charge. During the first 9 months of 1933 the center took care of 697 surgical cases and 124 fractures.

Protection to Life and Health of Union Members Provided for in Collective Agreements

ABOUT 350 of some 700 collective agreements analyzed on this point by the Bureau of Labor Statistics make some provision to prevent injury to life and limb and ill health caused by working conditions.

These provisions differ according to the hazards of the different trades. Many agreements in the printing trades contain provisions designed to improve working conditions, such as the installation of sanitary fixtures, an efficient lighting system, proper ventilation, sufficient heat in workrooms during cold weather, and pure, cool drinking water during the summer. Many also require that all machines creating dust or gases shall be equipped in such manner as to protect the health of the employees, and that all sweeping and dusting of composing rooms shall be done outside of working hours. Protective provisions in building-trades agreements are varied. Inspection of ladders and scaffolds used by the workers; overhead protection against falling objects; temporary floors above and below the workers; inclosed and heated buildings from November 1 to April 1; restriction or control of the use of spray machines for applying paint; and the piping to outside of buildings of salamanders, gas or gasoline torches—these are a few of the most general provisions.

In a few of the trades the employer is required to furnish goggles for the use of employees, to prevent injury to the eyes from dust or flying chips of metal or wood. In the trades in which employees work in acid or water, or are exposed to inclement weather, the agreements provide that the employer shall furnish protective clothing such as rubber coats, boots, and gloves.

Practically all agreements of the stone-trade unions contain provisions for the protection of the health of their members. Thus, the use of hand surfacers and bumpers is prohibited; no surface-cutting machines, turning lathes, or sand blast may be worked without suitable dust-removing device; and shelter for the workers must be furnished at all times. Agreements of bakery workers, barbers, and clothing and wearing-apparel workers generally provide that shops and workrooms shall be kept in a clean and sanitary condition; and a large number of these agreements demand compliance with all State and municipal laws for the health and safety of the workers.

The following are examples of the provisions for the protection of union members as they appear in the collective agreements studied:

Bakery workers.—The bakeshop must be in a sanitary condition, must be clean and have plenty of ventilation. A clean place must be furnished for dressing and lunching. Distilled water for drinking purposes must be in the shop. The bakeshop must not be in a basement.

Power-driven machinery in the bakery trade is a danger and hazard to the workers. In case of accident or crippling of a worker he must be paid one half of a week's wages in a period of 2 weeks.

Barbers.—I agree to keep my shop not less than 65° temperature in cold months. I also agree to keep my shop well ventilated and free from flies either by screens or electric fans.

Brewery and soft-drink workers.—Employers shall furnish and install all necessary appliances to insure employees against danger to health, life, and limb. When obliged to wash containers, tank, or kettles with strong solutions, they shall be furnished with suitable clothing.

Men employed at machines shall be provided with goggles if danger prevails. No employee shall be forced or required to work at varnishing without necessary safety appliances and precautions furnished and utilized.

Brick and clay workers.—Each man exposed to rain, working in clay pit, shall be supplied with one pair of rubber boots and one raincoat for the year, to be used during wet weather. The boots and coat to be left in charge of the foreman when not in use.

Broom makers.—Shops shall be properly heated, ventilated, and kept free from smoke, and otherwise conform to the State law.

Bricklayers, masons, and plasterers.—On all outside scaffolds where other craftmen are working above our men, an overhead protection shall be firmly attached either to cable supports or upon suitable framework erected thereon, said protection to be not more than 8 or 9 feet above platform upon which members are working.

All scaffolds 10 feet or more from the ground must have railing not less than 3 feet high. No member shall work over an open salamander, and all stoves must have a pipe connection to carry off coal gas.

Carpenters.—Elevator, stairs, and other openings shall be properly safeguarded against accident at all times, and walks, scaffolds, and ladders shall be properly erected and guarded.

Cement finishers.—No member of this local shall be allowed to work where there are open salamanders, gasoline, oil, or any torch which is injurious to the health of our members. Salamanders must be piped to a flue or outside opening. Buildings shall be inclosed from November 15 to April 15, and heated to 40°.

No work shall be done from ladders over 15 feet high. All shafts and dangerous places shall be sheeted above and below finishers.

Electrical workers (inside wiremen).—No electrical worker is permitted to work in an elevator shaft with a working elevator except when there is a journeyman electrical worker or a contractor stationed at the control of the elevator.

Electrical workers (power lines).—The company shall furnish members of the brotherhood with all proper safety appliances for protection of life and property in the performance of their duties.

As a matter of safety there shall always be two journeymen on pole when there is work on wires of 2,500 volts potential. When working on wires of 6,600 volts potential and over there shall always be not less than three journeymen linemen on pole, equipped with proper sticks and rubber gloves. When less than three men are present it will be permissible for foreman to work on pole with men.

Steam and operating engineers.—Employers shall be required to furnish suitable shelter to protect employees from falling material and the elements of the weather. Heat must be furnished for engineers when they are operating gasoline or electric engines.

Hod carriers and building laborers.—Employer shall provide a suitable place where workers can change their clothing and eat their lunch, with heat when

weather demands it. Rubber boots must be provided for men when working where there is mud and water.

Wood, wire, and metal lathers.—All buildings must be enclosed between November 1 and March 31. All elevator shafts must be properly covered two floors above and one floor below where lathers are working. Roofs must be tight and all floors except the first floor must be ready before lathers begin work.

Painters, decorators, and paperhangers.—Contractors must secure a permit to use spray machine. All operators must be furnished with a suitable respirator. Spray machines cannot be used on any smooth finished surface, interior or exterior. All hand mixing of dry lead or lead paints, and any process of grinding lead or lead colors causing dust is prohibited.

Not more than two nor less than two men will be allowed to work on a swinging scaffold. Employer must furnish practical rigging and no man will be allowed to sit or stand on window sill to paint sash or frames. All scaffolding, rigging, and tackle used by members shall be inspected at least once a month to insure the safety of members.

Operative plasterers.—All shafts and dangerous places must be sheeted tight above and below to insure safety of men employed. On and after November 1 to April 1, all buildings shall be enclosed in suitable manner to exclude weather conditions. All buildings shall be heated to a temperature of not less than 40° before the plasterer shall be allowed to work in same.

Plumbers, steam fitters, and gas fitters.—It shall be the duty of the employer to furnish proper and sufficient staging material and rigging for safety of the members. All buildings to be enclosed from October 1 to April 1.

Slate, tile, and composition roofers.—On roofs over one quarter pitch a safe scaffold shall be erected to within 24 inches of the eave and at least 24 inches wide.

Employers shall provide employees with rubber-soled shoes for work on steep roofs, and with rubber boots on all waterproofing jobs when necessary. Such articles to be returned to employer when job is finished.

Structural-iron workers.—Planks must be placed on erection floor, and adequate floor protection for at least two floors below riveting gangs.

Employers shall provide a suitable place for members to change their clothes and eat their lunch, which shall be heated in the winter.

Cigar makers.—All shops shall be provided with drinking water, washing facilities with sufficient clean water. Shops shall be properly heated in the winter. Sweeping, grinding, or sifting of scraps, or creating unnecessary dust shall not be permitted during working hours.

Fur workers.—Observance of all laws relating to fire protection, and all State labor laws shall be considered a part of this contract.

Ladies' garment workers.—Employer agrees that at expiration of lease on premises now occupied by him he will not enter into any new lease for either the premises now occupied or new premises in which his shop is to be located unless first approved by the Joint Board of Sanitary Control as being sanitary, safe, and free from fire dangers.

Employer agrees to maintain such standards of safety and sanitation in his factory as are required by the laws of the State, and the ordinances of the city, and the observance thereof is hereby declared to be an essential part of this contract.

Men's clothing workers.—Employer agrees to keep his shop in a sanitary condition, and agrees to comply with all State and municipal laws for health and safety of employees.

Neckwear makers.—No shop shall be maintained in a tenement house in dwelling part, in store, basement or any part thereof, nor in any rear house, nor in any unsanitary or unfit place.

Tailors.—Strictly sanitary workshops wherein the major portion of the work hours may be worked by natural light shall be provided by employer.

Laundry workers.—Employers shall furnish cool drinking water and essential sanitary conveniences to insure health and comfort of employees.

Longshoremen.—When rubbers, leather hand pads, or gloves are required same will be furnished by employer. If not returned they will be charged against man failing to return same.

All hatches and gangways in the compartment in which men are working shall be open in order to give the men all the air possible. All obstructions shall be removed from spar and main decks.

Meat cutters.—No member of local will be permitted to work in a shop unless a wood floor covering is placed over floor where concrete floor exists behind the counters.

Machinists.—Company agrees to furnish right working conditions, including safety, sanitation, and all reasonable conveniences. Men will be protected from weather conditions.

Blacksmiths.—Employer agrees to give the blacksmith every protection possible against injury and weather conditions.

Boilermakers and iron-ship builders.—Care shall be exercised to guard workmen against accidents caused by unsafe staging, burnt-out work falling, explosion of gas tanks, dropping tools and material, foul air, etc. Goggles shall be furnished for the grinding of tools so as to protect the eyes of employees.

Photo-engravers.—All shops shall be kept in a well-ventilated and sanitary condition. Adequate supply of good drinking water and individual glasses. First-aid kit shall be placed in accessible place.

Printing pressmen.—Pressrooms shall at all times be clean, sanitary, and healthful, properly heated and lighted, and so ventilated that gases, vapors, or dust produced or generated shall be prevented from escaping into the air. Pipes, hoods, or frames for each machine producing gases. Hot water, soap, and clean towels at all times.

Stereotypers and electrotypers.—Employer agrees to furnish a clean, sufficiently ventilated, properly heated and lighted stereotyping room.

Typographical workers.—Employer agrees to furnish a clean, healthful, sufficiently ventilated, properly heated and lighted place for all work performed in composing room; all machines or apparatus operated in, or adjoining composing room from which dust, gases, or other impurities are produced or generated shall be equipped in such manner as to protect the health of employees. All sweeping prohibited during working hours.

Granite cutters.—A closed partition to be placed between the hand worker and all kinds of surface machines. The bumper shall not be used. All air used in pneumatic tools by members of the association shall be heated during the winter months. Practical suction devices to be attached to all air tools when procurable.

Suitable sheds must be provided for cutters for shelter from the rain and the sun. Such sheds shall be kept clean and a stove and fuel furnished for each gang or fraction thereof employed during the winter months.

Stonecutters.—Employer agrees that during June, July, August, and September he will thoroughly protect employees from the sun and rain; and from November to March he will protect employees from inclemencies of the weather. Proper facilities shall be provided for the elimination of the dust nuisance in all shops.

Quarry workers.—No blasting permitted during the noon period. Employees shall be given ample time to reach a place of safety before fuse or battery is set off.

Railroad shopmen.—Employees will not be assigned to jobs where they will be exposed to sand blasts or paint blowers while in operation. All acetylene or electric arc welding or cutting will be protected by screens when its use is required. Shops and roundhouses shall be equipped to blow off steam outside of buildings. No employee shall work under a locomotive without being protected by signals.

Street and electric railway employees.—Vestibules on all cars shall be properly heated and all cars properly heated inside. All busses shall have emergency brakes and 18-inch mirrors so operator shall be able to see on both sides of bus. Trackmen who are compelled to work in rainy weather or where it is necessary to wear rubber boots the same shall be furnished by the company.

Employees in service of the company shall be permitted to wear sunglasses, if made necessary as a protection to their eyes. All watchmen shall be furnished with rubber boots. Welders shall be furnished with leather aprons and rubber gloves.

Company agrees to furnish once every 2 years to all interurban linemen where protection from weather is not afforded 1 pair of rubber boots and 1 rubber coat. Rubber gloves will be furnished all men working on lines, as often as seems necessary.

Teamsters and chauffeurs.—All motor trucks shall be provided with stormproof enclosures and seats for chauffeur and helper. Wagon washers to be provided with aprons and boots.

Employer shall furnish drivers with boots, also covers for horses. All boots, covers, and other equipment shall be properly marked and cared for after working hours.

Upholsterers.—All new materials are to be used in the manufacture of upholstered furniture, and employers must maintain sanitary conditions in workrooms.

Window cleaners.—It is agreed that the employer shall furnish, without any cost to the employee, all standard safety devices and safety appliances necessary to the work performed by the employees. No employee shall be required to perform work that is deemed unsafe to life or limb.

INDUSTRIAL ACCIDENTS

Accident Experience of Government Employees, 1921–32

INJURY frequency rates, computed by the Bureau of Labor Statistics from injuries reported by civilian employees in Federal service for the years 1921 to 1932, show that 19 workers were killed and 2,112 injured in 1932 for every 100,000,000 man-hours worked, as compared with 28 killed and 1,485 injured in 1921 per 100,000,000 man-hours worked.

There was consequently a decrease during the 12 years of 32.1 percent in fatal injury rates, but an increase of 42.2 percent in nonfatal injury rates.

In this study the Bureau has succeeded for the first time (through the cooperation of the various branches of the Federal service) in obtaining practically complete data on actual man-hour exposure for each year of the period from each branch of the service. This made it possible to revise the rates previously published for 1921–27, which had been based on an assumed uniform 8-hour workday, as well as to compile new rates for 1928–32 on an actual man-hour basis.

It was, however, found necessary to continue computation based on the total number of injuries reported to the United States Employees' Compensation Commission, which includes not only injuries resulting in disabilities extending beyond the day of injury (disabling injuries), but also those requiring medical attention other than first-aid treatments but not involving any time loss. Accurate figures for disabling injuries are not available by year of occurrence, but the number of these seemingly ranged from 62 to 78 percent of the reported nonfatal injuries. Inclusion of the injuries requiring medical attention consequently increases the frequency rate for the nonfatal injuries from 22 to 38 percent over the rate published in other studies of the Bureau, in which the rates were based on disabling injuries only. Proper allowance must therefore be made when comparing the rates for Government employees with other rates.

The increase in nonfatal rates, however, supports conclusively the suggestions which have appeared in the annual reports of the United States Employees' Compensation Commission about the desirability of a well directed and sustained accident-prevention program in the Federal civilian service.

While this class of employment is ordinarily considered as essentially clerical and, consequently, not subject to special accident hazards, large divisions of the work involve dangers fully comparable to those encountered in many of the most hazardous private enterprises.

Notable among these is the Forest Service of the Department of Agriculture, in which numbers of workers are employed in connection with the suppression of forest fires. This is extremely hazardous work and is generally of an emergency character, which necessitates securing temporary workers largely from the ranks of casual or floating labor.

The Reclamation Service of the Department of the Interior and the Engineer Department of the Army, with large numbers of employees engaged in construction work, also involve extrahazardous activities.

Work in the arsenals of the War Department and the navy yards of the Navy Department is comparable in danger with similar work in private industries. Work of a manual character is also performed in other branches of the Federal service but, with two exceptions, safety regulations for the manual workers as well as for the clerical employees are left to the discretion of the individuals or of the supervisors, and are practically nonexistent.

One of the two exceptions is the Department of the Navy, which in 1921 established an Office of Safety Engineering, in charge of a department safety engineer and with a local safety engineer in each of the 37 navy yards and stations. Efforts were at first devoted to safeguarding the physical causes of injury—installation of safety devices, elimination of dangerous conditions, and equipment of protective clothing. An educational program was added later, and in 1931 the safety movement was further stimulated through competitive awards. As a result, the frequency rate for the two thirds of the civilian employees of the Department, which are covered under the jurisdiction of the office of safety engineering, has been greatly reduced each year. In 1929 reports were received of 20.59 disabling injuries per 1,000,000 man-hours work, in 1930 of 17.69, in 1931 of 16.08, and in 1932 of 10.06.[1]

A large portion of the work performed in navy yards equals that of foundries and machine shops in private industry. The frequency rate obtained by the Bureau of Labor Statistics for this industry was 33.69 in 1929, 26.50 in 1930, 26.09 in 1931, and 23.79 in 1932, decidedly higher than the rates for the navy yards and other naval stations. Shipbuilding, another of the activities, also presents considerably higher rates in private industry—23.59 in 1929, 29.66 in 1930, 36.89 in 1931, and 26.11 in 1932.

The other exception is the Government Printing Office, where health and safety provisions for employees have been carefully

[1] According to later information the rate was reduced to 7.06 disabling injuries per 1,000,000 man-hours worked in 1933.

developed and maintained by the administration, with the assistance of an efficiently organized hospital department under the direction of a medical and sanitary officer. Complete physical examination, including tests of vision and hearing, are made of all new employees and physical qualifications are important factors in assigning employees to suitable tasks.

In spite of the manual work performed, the experience of the Government Printing Office shows proportionately fewer injuries, in each year from 1922 to 1932, than in any other branch of the service. Its frequency rates are also considerably less than the average frequency rates quoted by the National Safety Council for its members in the printing and publishing industry, presumably the best-regulated private establishments of similar character. The average frequency rates (per 1,000,000 man-hours) shown by the National Safety Council were 13.52 in 1928, 12.23 in 1929, 9.67 in 1930, 9.12 in 1931, and 6.87 in 1932, and these rates were for disabling injuries only. The frequency rates (per 1,000,000 man-hours) computed for the Government Printing Office were 3.94 in 1928, 4.62 in 1929, 4.96 in 1930, 3.34 in 1931, and 3.67 in 1932. These rates, however, included injuries requiring only medical attention other than first-aid treatment, so are approximately 30 percent higher than if computed on the same basis as the rates of the National Safety Council.

Aside from the Department of the Navy and the Government Printing Office, The Department of Labor is the only branch of the service which shows a reduction in rates for 1932, as compared with 1921. This cannot be considered a satisfactory condition. Neither is it satisfactory to consider that the 1932 frequency rates for the Department of Agriculture, the Department of the Interior, and the Department of War were all higher (if figured on similar basis) than the 1932 frequency rates in the Bureau's studies of the iron and steel industry (18.06) and selected manufacturing industries (19.55).

The following table shows the number of fatal and nonfatal accidents reported to the United States Employees' Compensation Commission, and frequency rates for these, computed on basis of man-hour exposure as obtained from the respective departments, by departments and by years, from 1921 to 1932. The number of employees shown in the table is the average number for each department as reported by the Civil Service Commission, but not used for computing of rates.

Average frequency rates for 1932 were lower than the general average in 5 of the establishments for which separate figures are shown and in the group of miscellaneous establishments, and higher in the remaining 5 departments.

NUMBER OF INJURIES AND INJURY FREQUENCY RATES IN FEDERAL CIVILIAN SERVICE, 1921–32, BY DEPARTMENT AND YEAR

[Based on number of injuries reported to United States Employees' Compensation Commission]

All Government Services

Year	Average number of employees	Number of injuries			Frequency rates (per 1,000,000 hours' exposure)		
		Fatal	Non-fatal [1]	Total	Fatal injuries	Nonfatal injuries [1]	Total
1921	567,757	344	18,046	18,390	0.28	14.85	15.13
1922	542,562	349	17,910	18,259	.30	15.36	15.66
1923	543,404	265	17,727	17,992	.22	15.03	15.25
1924	555,265	268	20,270	20,538	.22	16.96	17.18
1925	565,323	305	20,386	20,691	.25	16.57	16.82
1926	568,990	263	19,264	19,527	.21	15.56	15.77
1927	574,751	358	20,189	20,547	.29	16.38	16.67
1928	587,017	307	21,882	22,189	.24	17.41	17.65
1929	601,150	334	25,356	25,690	.26	19.71	19.97
1930	598,644	292	25,777	26,069	.23	20.12	20.35
1931	611,729	262	28,176	28,438	.21	22.40	22.61
1932	583,427	231	25,117	25,348	.19	21.12	21.31
Total		3,578	260,100	263,678	.24	17.66	17.90

Department of Agriculture

1921	18,722	10	638	648	0.25	15.78	16.03
1922	19,773	11	919	930	.26	21.51	21.77
1923	20,078	17	971	988	.39	22.38	22.77
1924	20,385	25	1,287	1,312	.57	29.16	29.73
1925	20,098	26	1,291	1,317	.60	29.69	30.29
1926	20,689	34	1,652	1,686	.76	36.87	37.63
1927	21,519	27	1,760	1,787	.58	37.92	38.50
1928	22,361	28	1,933	1,961	.58	40.09	40.67
1929	23,513	38	3,281	3,319	.75	64.67	65.42
1930	25,626	24	2,795	2,819	.43	50.40	50.83
1931	27,846	55	4,084	4,139	.95	70.96	71.91
1932	27,280	31	3,427	3,458	.55	60.86	61.41
Total		326	24,038	24,364	.57	41.90	42.47

Department of Commerce

1921	11,748	9	246	255	0.35	9.54	9.89
1922	11,267	15	272	287	.62	11.32	11.94
1923	11,199	11	332	343	.45	13.65	14.10
1924	12,119	8	319	327	.32	12.63	12.95
1925	14,631	11	348	359	.35	11.15	11.50
1926	14,683	11	433	444	.35	13.90	14.25
1927	14,951	11	414	425	.35	13.13	13.48
1928	15,678	9	409	418	.27	12.24	12.51
1929	17,075	21	474	495	.59	13.40	13.99
1930	25,483	17	558	575	.33	10.79	11.12
1931	22,195	6	685	691	.14	15.63	15.77
1932	19,829	9	555	564	.22	13.79	14.01
Total		138	5,045	5,183	.35	12.68	13.03

Government Printing Office

1921	4,403	2	89	91	0.21	9.25	9.46
1922	4,024	1	63	64	.11	6.96	7.07
1923	3,989		42	42		4.91	4.91
1924	4,269		44	44		4.87	4.87
1925	3,984		27	27		3.14	3.14
1926	4,110	1	39	40	.11	4.34	4.45
1927	4,032		42	42		4.67	4.67
1928	4,122		35	35		3.94	3.94
1929	4,298		42	42		4.62	4.62
1930	4,624	1	47	48	.10	4.86	4.96
1931	4,969		35	35		3.34	3.34
1932	4,897	1	36	37	.10	3.57	3.67
Total		6	541	547	.05	4.87	4.92

[1] Includes medical cases.

NUMBER OF INJURIES AND INJURY FREQUENCY RATES IN FEDERAL CIVILIAN SERVICE, 1921-32, BY DEPARTMENT AND YEAR—Continued

Department of the Interior

Year	Average number of employees	Number of injuries			Frequency rates (per 1,000,000 hours' exposure)		
		Fatal	Nonfatal [1]	Total	Fatal injuries	Nonfatal injuries [1]	Total
1921	19,735	14	957	971	0.34	23.15	23.49
1922	17,834	18	1,041	1,059	.48	27.98	28.46
1923	17,092	16	1,415	1,431	.44	38.84	39.28
1924	16,679	19	1,676	1,695	.55	48.20	48.75
1925	13,125	11	1,019	1,030	.29	27.06	27.35
1926	13,468	8	609	617	.21	15.88	16.09
1927	14,960	9	676	685	.28	21.39	21.67
1928	15,216	11	784	795	.35	24.64	24.99
1929	15,465	15	902	917	.47	28.07	28.54
1930	16,617	19	1,096	1,115	.55	31.52	32.07
1931	17,520	10	1,325	1,335	.28	37.76	38.04
1932	17,302	10	1,262	1,272	.29	36.45	36.74
Total		160	12,762	12,922	.38	29.97	30.35

Department of Labor

1921	3,768	1	112	113	0.14	15.79	15.93
1922	3,744	2	100	102	.28	14.18	14.46
1923	3,821		112	112		15.57	15.57
1924	3,876	1	111	112	.14	15.21	15.35
1925	3,614	5	107	112	.73	15.72	16.45
1926	4,012	2	90	92	.26	11.91	12.17
1927	4,051	2	74	76	.26	9.76	10.02
1928	4,218	2	96	98	.25	12.16	12.41
1929	4,425	7	106	113	.83	12.52	13.35
1930	4,948	5	99	104	.54	10.69	11.23
1931	5,392	1	110	111	.10	11.35	11.45
1932	5,723	4	123	127	.39	12.02	12.41
Total		32	1,240	1,272	.33	12.90	13.23

Department of the Navy

1921	60,653	36	2,918	2,954	0.29	23.41	23.70
1922	42,515	27	1,516	1,543	.31	17.35	17.66
1923	40,557	30	1,423	1,453	.36	17.18	17.54
1924	42,686	28	1,882	1,910	.32	21.25	21.57
1925	42,842	24	1,662	1,686	.27	18.87	19.14
1926	42,973	39	1,778	1,817	.44	20.02	20.46
1927	43,198	27	1,696	1,723	.30	19.14	19.44
1928	46,183	35	1,875	1,910	.37	19.92	20.29
1929	49,728	30	2,128	2,158	.29	20.57	20.86
1930	47,749	28	1,847	1,875	.28	18.31	18.59
1931	47,750	25	1,660	1,685	.26	17.07	17.33
1932	47,064	36	1,096	1,132	.39	12.01	12.40
Total		365	21,481	21,846	.32	18.91	19.23

Post Office Department

1921	281,658	62	5,218	5,280	0.10	8.30	8.40
1922	284,207	64	6,196	6,260	.10	9.77	9.87
1923	294,226	50	6,559	6,609	.08	9.87	9.95
1924	301,000	42	7,395	7,437	.06	11.01	11.07
1925	304,092	47	7,488	7,535	.07	11.03	11.10
1926	307,075	56	7,896	7,952	.08	11.52	11.60
1927	309,451	54	8,862	8,916	.08	12.93	13.01
1928	311,954	49	9,226	9,275	.07	13.35	13.42
1929	315,159	51	9,635	9,686	.07	13.80	13.87
1930	316,796	53	9,940	9,993	.08	14.16	14.24
1931	315,983	40	9,782	9,822	.06	14.63	14.69
1932	287,032	34	8,107	8,141	.05	13.35	13.40
Total		602	96,304	96,906	.08	12.01	12.09

[1] Includes medical cases.

NUMBER OF INJURIES AND INJURY FREQUENCY RATES IN FEDERAL CIVILIAN SERVICE, 1921-32, BY DEPARTMENT AND YEAR—Continued

Department of the Treasury

Year	Average number of employees	Number of injuries			Frequency rates (per 1,000,000 hours' exposure)		
		Fatal	Non-fatal [1]	Total	Fatal injuries	Nonfatal injuries [1]	Total
1921	68,648	30	1,157	1,187	0.23	8.83	9.06
1922	56,392	44	1,203	1,247	.41	11.17	11.58
1923	53,604	17	938	955	.17	9.15	9.32
1924	53,121	16	1,013	1,029	.16	9.97	10.13
1925	52,607	22	1,037	1,059	.22	10.30	10.52
1926	51,569	19	864	883	.19	8.80	8.99
1927	51,741	22	983	1,005	.22	9.97	10.19
1928	51,681	31	1,040	1,071	.31	10.56	10.87
1929	52,671	26	1,175	1,201	.26	11.84	12.10
1930	51,643	8	1,067	1,075	.08	10.96	11.04
1931	50,814	11	1,145	1,156	.11	11.95	12.06
1932	52,438	11	1,080	1,091	.12	11.31	11.43
Total		257	12,702	12,959	.21	10.35	10.56

Department of War

1921	53,553	124	6,125	6,249	1.11	55.06	56.17
1922	46,840	104	5,648	5,752	1.07	57.95	59.02
1923	44,842	96	4,913	5,009	1.03	52.67	53.70
1924	45,906	102	5,295	5,397	1.07	55.65	56.72
1925	38,975	115	5,793	5,908	1.42	71.61	73.03
1926	42,923	63	4,700	4,763	.71	52.67	53.38
1927	40,533	124	4,496	4,620	1.48	53.75	55.23
1928	47,738	103	5,110	5,213	1.04	51.81	52.85
1929	48,842	98	6,172	6,270	.97	61.16	62.13
1930	48,270	97	6,545	6,642	.97	65.65	66.62
1931	51,680	83	7,234	7,317	.82	71.14	71.96
1932	49,863	64	7,064	7,128	.65	71.98	72.63
Total		1,173	69,095	70,268	1.02	60.08	61.10

District of Columbia Government

1921	7,084	2	130	132	0.14	9.02	9.16
1922	7,444	1	156	157	.06	10.28	10.34
1923	7,623	.....	177	177	.....	11.41	11.41
1924	8,084	.....	253	253	.....	15.38	15.38
1925	8,444	1	316	317	.06	18.43	18.49
1926	8,972	1	318	319	.05	17.43	17.48
1927	9,120	3	359	362	.16	19.46	19.62
1928	9,379	1	449	450	.05	23.67	23.72
1929	9,527	1	539	540	.05	28.03	28.08
1930	9,815	.....	566	566	.....	28.60	28.60
1931	10,919	4	631	635	.18	29.20	29.38
1932	10,584	.....	700	700	.....	34.33	34.33
Total		14	4,594	4,608	.07	21.33	21.40

Other Government services

1921	37,785	54	456	510	0.67	5.63	6.30
1922	48,522	62	796	858	.59	7.63	8.22
1923	46,373	28	845	873	.28	8.39	8.67
1924	47,140	27	995	1,022	.27	9.79	10.06
1925	62,911	43	1,298	1,341	.31	9.47	9.78
1926	58,516	29	885	914	.23	6.94	7.17
1927	61,195	79	827	906	.60	6.30	6.90
1928	58,487	38	925	963	.30	7.38	7.68
1929	60,447	47	902	949	.36	6.97	7.33
1930	47,073	40	1,217	1,257	.40	12.07	12.47
1931	56,661	27	1,485	1,512	.23	12.74	12.97
1932	61,415	31	1,667	1,698	.25	13.30	13.55
Total		505	12,298	12,803	.36	8.91	9.27

[1] Includes medical cases.

Quarry Accidents in the United States in 1931

ACCIDENT reports received by the United States Bureau of Mines from operators of quarries show a better safety record for 1931 than for any year since 1913.[1] Doubtless the 1931 nonfatal-injury rate was also better than that for the years 1911 to 1913, as many accident reports for those early years probably were incomplete as regards minor injuries.

Of the 5,488 total injuries reported in 1931, 61 resulted in fatalities, 16 in permanent total disabilities, 189 in permanent partial disabilities, and 5,222 in temporary disabilities.

Reduction took place in all factors. The average days active were reduced 12.2 percent, with 224 days active in 1931 as against 255 in 1930. The number of men employed dropped from 80,633 in 1930 to 69,200 in 1931, a reduction of 14.2 percent. Fatalities were reduced 41.9 percent, with 61 in 1931 as against 105 in 1930, and nonfatal injuries were reduced 26.8 percent, with 5,427 in 1931 as against 7,417 in 1930. There was a reduction of 27 percent in total injuries, from 7,522 in 1930 to 5,488 in 1931.

The table following shows the number of men employed and the number killed and injured, 1911–30, by 5-year periods, and 1926–31, by years.

NUMBER OF MEN EMPLOYED, NUMBER KILLED AND INJURED, AND FATAL AND NONFATAL INJURY RATES IN QUARRIES, 1911–31

Period or year	Average days active	Men employed		Men killed		Men injured	
		Actual number	Equivalent number of 300-day workers	Number	Per 1,000 300-day workers	Number	Per 1,000 300-day workers
1911–15 (average)	240	103,803	83,206	182	2.19	7,438	89.39
1916–20 (average	259	80,682	69,630	146	2.10	11,161	160.29
1921–25 (average)	263	86,967	76,377	136	1.78	13,247	173.44
1926	271	91,146	82,361	154	1.87	13,201	160.28
1927	271	91,517	82,609	135	1.63	13,459	162.92
1928	272	89,667	81,325	119	1.46	10,568	129.95
1929	268	85,561	76,559	126	1.65	9,810	128.14
1930	255	80,633	68,531	105	1.53	7,417	108.23
1926–30 (average)	268	87,705	78,277	128	1.64	10,891	139.13
1931	224	69,200	51,755	61	1.18	5,427	104.86

The principal causes of fatalities in 1931 were falls or slides of rock or overburden, resulting in 11 injuries; falls of persons, resulting in 9 injuries; and machinery, resulting in 7 injuries. In open quarries the principal causes of nonfatal injuries were handling materials (930), flying objects (416), and haulage (241), while at outside works the leading causes were handling materials (376), flying objects (333), and machinery (292).

[1] U.S. Department of Commerce. Bureau of Mines. Bulletin 375. Quarry accidents in the United States during the calendar year 1931, by William W. Adams. Washington, 1933.

Coke-Oven Accidents in the United States in 1932

THE United States Bureau of Mines report on coke-oven accidents during the calendar year 1932 [1] shows a 23 percent reduction in the number of workers, from 15,564 in 1931 to 12,002 in 1932, and also reductions in the number of days of labor performed, average days of operation, and the number of nonfatal injuries. Fatalities for the year 1932 were 14 as compared with 9 in 1931, an increase of 56 percent.

It is estimated by the Bureau of Mines that the 14 fatalities, 22 permanent partial disabilities, and 298 temporary disabilities reported in 1932 represent a loss of 105,474 days or an average of 316 days for each, an increase of 74 percent over the 1931 figure which was 182 days.

The following table shows the number of employees, days worked, fatalities, and lost-time nonfatal injuries, at all coke ovens in the United States for 1932, by States.[2]

NUMBER OF EMPLOYEES, DAYS OF LABOR PERFORMED, FATALITIES, AND LOST-TIME NONFATAL INJURIES AT COKE OVENS IN THE UNITED STATES, BY STATES, 1932

State	Men employed, actual number	Days of labor performed	Average days of operation	Fatalities	Nonfatal injuries
Alabama	619	216,013	349	1	17
Illinois	1,119	377,138	337		19
Indiana	656	239,628	365	2	8
Massachusetts	667	244,122	366		18
Michigan	909	332,523	366	1	29
Minnesota	292	89,710	307		12
New York	1,514	554,009	366	4	57
Ohio	1,111	396,935	357	2	21
Pennsylvania	2,451	796,939	325	2	59
Tennessee	105	36,399	347		4
Virginia	132	22,446	170		3
West Virginia	630	213,549	339	1	4
Not segregated	1,797	639,253	356	1	69
Total	12,002	4,158,664	346	14	320

Injury Frequency and Severity Rates in Manufacturing Establishments of Pennsylvania, 1932

THE injury frequency rate for a cross section of the manufacturing industries of Pennsylvania was reduced from 17.74 injuries per 1,000,000 man-hours worked in 1931 to 16.44 in 1932, according to a recent State report.[3] The severity rate, however, increased from 1.18 days lost per 1,000 man-hours worked in 1931 to 1.19 in 1932.

The changes varied considerably for the different industry groups. Decreases in frequency rates ranged from 2.9 percent for textile-products plants to 39.6 percent for food-products plants, while

[1] U.S. Department of Commerce. Bureau of Mines. Technical Paper 559: Coke-oven accidents in the United States during the calendar year 1932, by W. W. Adams and L. Chenoweth. Washington, 1933.

[2] For yearly totals, 1916–30, see Monthly Labor Review, issue of June 1932; and for 1931, see issue of January 1933.

[3] Pennsylvania. Department of Labor and Industry. Bureau of Accounts and Statistics. Accident frequency in Pennsylvania manufacturing plants declines in 1932. (Mimeographed report.)

increases in frequency rates ranged from 0.3 percent for chemical-products plants to 18.9 percent for stone, clay, and glass products plants. Decreases in severity rates ranged from 10.5 percent in chemical-products plants to 79.4 percent in paper and printing plants, while increases in severity rates ranged from 8.2 percent in metal-products plants, to 800 percent in stone, clay, and glass products plants.

A summary of the published tabulation is shown in the following table, which presents frequency and severity rates for 1931 and 1932, by industry groups, and the percent of decrease or increase in 1932.

INJURY FREQUENCY AND SEVERITY RATES IN PENNSYLVANIA MANUFACTURING INDUSTRIES, 1931 AND 1932

Industry group	Frequency rates (per 1,000,000 hours worked)		Severity rates (per 1,000 hours worked)		Percent decrease or increase in 1932	
	1931	1932	1931	1932	Frequency rates	Severity rates
Metal products	19.62	20.05	1.58	1.71	+2.2	+8.2
Transportation equipment	23.24	24.42	2.38	1.06	+5.1	−55.5
Textile products	5.81	5.64	.41	.17	−2.9	−58.5
Food products	45.82	27.67	.84	.93	−39.6	+10.7
Stone, clay, and glass products	10.12	12.03	.15	1.35	+18.9	+800.0
Lumber products	23.44	24.38	2.96	6.22	+4.0	+110.1
Chemical products	20.45	20.52	1.81	1.62	+.3	−10.5
Leather and rubber products	13.74	14.04	.44	3.03	+2.2	+588.6
Paper and printing	15.91	13.81	1.02	.21	−13.2	−79.4
Total	17.74	16.44	1.18	1.19	−7.3	+.8

LABOR LAWS AND COURT DECISIONS

Labor Legislation During 1933

DURING the year 1933 the Federal Congress and the State legislatures [1] meeting in session enacted more legislation affecting phases of the employer-employee relation than in any period since the founding of the Nation. This is, of course, a direct result of the period of economic depression. Attention has been focused upon conditions of labor and it has resulted in remedial legislation. The Federal Government adopted the National Industrial Recovery Act to rehabilitate trade and industry; enacted legislation establishing a system of free public employment agencies in cooperation with the States; launched a tremendous program of public works, and created the Civil Works Administration and the Civilian Conservation Corps, in an endeavor to supply gainful employment to many of the unemployed. In the States, attention was likewise turned toward social legislation in an effort to cope with the depression and to care for the thousands rendered destitute because of the change in economic conditions. Twelve States and one Territory established old-age pension systems, bringing the total number of States having enacted old-age pension laws to 28, in addition to the Territories of Alaska and Hawaii.

A renewed interest has been aroused in the field of minimum-wage legislation. During the year 1933 seven States enacted laws requiring the payment of a minimum wage to women and minors. This number added to the total of 9 laws already in force makes 16 States operating under minimum wage laws.

Under the impetus of the acute unemployment conditions the status of the proposed child labor amendment to the Federal Constitution was changed from that of a doomed proposal to a live issue brought to the front by its ratification in 14 States during the year.

Anti-injunction laws and laws declaring antiunion contracts void were also enacted by several of the States. Fourteen States took advantage of the Hawes-Cooper Act, divesting convict-made goods

[1] All State legislatures except those in Alabama, Kentucky, Louisiana, Mississippi, and Virginia met in regular session; special sessions were held in the following States: Alabama, Arizona, Arkansas, Colorado, Delaware, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

The State of Mississippi did not meet in session during the year 1933.

of their interstate character, and passed legislation restricting the sale of goods manufactured in the State prisons.

The following topical outline of the labor legislation enacted during the year 1933 does not include workmen's compensation legislation, as a special article will be devoted to this subject, nor changes in the absent voting laws of the States, and several other subjects such as the examination, licensing, etc., of workmen.[2]

Federal Legislation

IN ADDITION to the National Industrial Recovery Act the Federal Congress passed many other laws affecting labor. The President was authorized to create emergency conservation corps by an act (48 Stat. L. 22) approved early in the session. Under the provisions of this act the reforestation corps was created to do work in the forests, such as the prevention of forest fires, floods, and soil erosion, and the attacks of plant pests and diseases, and the construction of roads, etc., in the national parks and forest reserves.

Part II of the National Recovery Act (48 Stat. L. 195) called for public works and construction projects. Special labor provisions (sec. 206) are found in the act, prohibiting the use of convict labor, authorizing a 30-hour week, and calling for the payment of just and reasonable wages. Preferences in employment are also outlined.

The Federal act creating a national system of employment agencies (48 Stat. L. 113), is discussed elsewhere in this article.

Other laws passed during the recent session of the Congress which are of interest to labor are the Emergency Railroad Transportation Act (48 Stat. L. 211), the Home Owners' Loan Act (48 Stat. L. 128), the Emergency Relief Act (48 Stat. L. 55), the Agricultural Adjustment Act (48 Stat. L. 31), and the law authorizing the development of the Tennessee Valley and the operation of the Government properties at Muscle Shoals, Ala. (48 Stat. L. 58).

The Civil Works Administration was created during the year 1933 to provide employment and relief to those unemployed and in need.

Section 77 of the Federal Bankruptcy Act, as amended (47 Stat. L. 1467), requires that wages or working conditions of railroad employees be not changed except in the manner prescribed in the Railroad Labor Act, or as set forth in the memorandum of agreement entered into on January 31, 1932, between the executives of 21 standard labor organizations and the committee of 9 authorized to represent class I railroads.

Child labor amendment.—During the year 1933, 14 States ratified the proposed child-labor amendment to the Federal Constitution. The fact that the labor of children under 16 years of age is prohibited under the majority of the industrial codes adopted under the N.R.A. is not

[2] A more complete summary and a reproduction of some of the laws will be given later in bulletin form covering the labor legislation for 1933 and 1934.

deemed sufficient completely to stamp out this evil and a more permanent prohibition is desired. The following States, having ratified the proposed amendment during the year 1933, may be added to the six States which had already ratified the proposed amendment: Illinois, Iowa, Maine, Michigan, Minnesota, New Hampshire, New Jersey, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Washington, and West Virginia.

National Industrial Recovery Act

PERHAPS the most outstanding and far-reaching piece of legislation enacted during the past year was the National Industrial Recovery Act[3] passed during the special session of the Congress. This act brings all industries under codes which prescribe the maximum hours of labor and the minimum rates of wages in each classification or division of the industry, and also regulate other conditions of employment.

In many of the States, statutes have been enacted supplementing the provisions of the Federal act. These statutes follow the same outline as the National Industrial Recovery Act and indicate a desire on the part of the States to cooperate with the Federal Government in the emergency program to rehabilitate trade and industry. The following States have enacted laws on this subject: California (chs. 1037 and 1039); Colorado (ch. 187); Kansas (ch. 78, special session); Massachusetts (ch. 347); New Jersey (chs. 372 and 369); New York (chs. 781 and 783); Ohio (p. 603); Puerto Rico (Act No. 2, first special session); Texas (ch. —, special session); Utah (ch. 21, second special session); Virginia (ch. 61, special session); and Wisconsin (ch. 476).

In six of the States, namely, California, New Jersey, New York, Ohio, Utah, and Virginia, the law requires compliance with the provisions of the industrial codes adopted under the N.R.A. This of course brings all industry, intrastate as well as interstate, under the provisions of the codes adopted for the different industries, should there be any doubt about the inclusion of business engaged in purely intrastate activities.

All of the laws, except those adopted by California and Massachusetts, provide that the provisions of the various codes shall supersede State antitrust laws; and five of the States (California, New Jersey, Ohio, Utah, and Wisconsin) make provision for the adoption of State codes similar to the codes of fair competition adopted under the N.R.A.

In an effort to further the recovery program, the laws enacted in New Jersey, New York, Ohio, Virginia, and Wisconsin authorize the President, after securing the consent of the governor of the State, to

[3] For the text of this law see Monthly Labor Review, July 1933, p. 74.

use the services of the State employees to effectuate the recovery program.

The State of New Jersey makes it a misdemeanor falsely to display the Blue Eagle.

Contract of Employment

THE California Legislature (ch. 580) provided that penalties withheld for violation of labor provisions in a public contract shall, at the end of 90 days, be transferred to the State treasurer. The time for action by the contractor for the recovery of said penalties shall be limited to the said 90-day period. In Minnesota a law was enacted (ch. 250) prescribing the terms to be included in a contract of employment.

Discrimination in employment forbidden, etc.—The California Legislature (ch. 87) added a new section (sec. 1¼) to the law in regard to employees' bonds. Investments and the sale of stock or an interest in a business in connection with securing a position are made illegal.

In chapter 123, the Colorado law-making body prohibits discrimination in the employment of labor because of religious belief.

The Illinois Legislature (p. 296) and the Indiana Legislature (ch. 270) prohibited discrimination in public employment because of race or color, and the Wisconsin Legislature (ch. 12) prohibited discrimination in the employment of public-school teachers because of race, nationality, or political or religious affiliations.

The Minnesota Legislature (ch. 47) prohibited employers from accepting consideration for securing employment.

Employment Agencies

THE Legislature of California passed two resolutions (A.C.R. No. 45 and S.C.R. No. 38), requesting that free employment agencies be established in the section of Oakland west of Market Street and south of Twentieth Street, and in Bakersfield, Calif. Chapter 15960 of the Florida Acts authorized counties having a population of 155,000 to establish free county employment agencies. Oregon (ch. 132) amended the law (Code of 1930, secs. 49–803 and 49–804) relating to private employment agencies, providing a change in fees, etc. The Michigan law was also amended (No. 20).

The Federal Congress passed a law (48 Stat. 113) establishing a national system of employment agencies in cooperation with the States. The States must indicate their acceptance of the provisions of this act, and many of the States have accepted by a proclamation of the governor. The following States, however, took legislative action on this question: Colorado (ch. 9, special session), Connecticut (ch. 128), Illinois (S.J.Res. No. 33, p. 1138), Massachusetts (ch. 52, Resolve), New York (ch. 812), Ohio (p. 522), Pennsylvania (No. 26,

special session), Virginia (ch. 13, extra session), Wisconsin (ch. 360), and Wyoming (ch. —, special session).

Hours of Labor

Men.—Montana limited the hours of labor of employees in strip mining (ch. 76), cement plants (ch. 77), and sugar refineries (ch. 90) to 8 per day.

New Mexico limited the hours of labor in mercantile establishments to 8 per day and 48 per week (ch. 149), and those in hotels and restaurants to 10 per day. The New Mexico Supreme Court has declared unconstitutional the law restricting the hours of labor in mercantile establishments, see *State* v. *Henry* (25 Pac. (2d) 204).

South Dakota provided that a day's labor shall consist of 8 hours and no public employee is allowed to work longer (ch. 10, special session).

Texas regulated the hours of labor of employees in the fire department; no employee shall remain on continuous duty more than 10 consecutive hours during the day or 14 hours during the night (ch. 170).

The State of Washington (ch. 120) authorized cities to regulate by ordinance the hours of barber shops and the time of opening and closing the same.

Women and minors.—By chapter 279, the Connecticut Legislature limited the hours of labor of women and minors in mercantile establishments to 9 per day, and 6 days or 52 hours in a calendar week. Section 1118b of the same chapter forbids the employment of a woman or minor in a restaurant, cafe, dining room, barber shop, hair-dressing or manicuring establishment, or photograph gallery between the hours of 10 p.m. and 6 a.m., or more than 9 hours per day or 52 hours per week.

The Indiana Legislature, by chapter 68, amended section 9411 of Burns' Annotated Statutes, 1926, placing a prohibition on the employment of women or female young persons in manufacturing between 10 p.m. and 6 a.m., except when there are 2 shifts of not more than 8 hours each working not more than 5 days per week.

Chapter 347 of the Massachusetts Acts authorized the commissioner of labor to suspend, for and during the time any code for the regulation of textile industries is in effect under the National Industrial Recovery Act, so much of section 59, chapter 149, General Laws of 1932, as prohibits the employment of women in the manufacture of textile or leather goods after 6 o'clock in the evening.

In chapter 63 the Minnesota Legislature amended section 4106, General Statutes of 1923, regulating the hours of labor of minors, strengthening the law regulating the employment of minors by declaring the violation of the law a misdemeanor, while chapter 354 places a limit of 54 hours per week upon the hours of labor of women; certain

exceptions are made, and the law prescribes schedules and reports to be kept by the employer.

New Jersey, in chapter 265, amended the law regulating the employment of minors.

New Mexico limits the hours of labor of women to 8 hours in 24 or 48 hours in any week of 6 days. Special provision is made in case of public-utilities or telephone-exchange employees (ch. 148).

North Carolina (ch. 35) restricted the hours of labor of women in certain employments to 10 per day and 55 per week.

Texas (ch. 114) amended articles 1569 and 1572, chapter 3, title 18, of the Revised Penal Code of 1925, regulating the working hours of female employees.

The Utah law regulating the hours of labor of minors, as well as covering the general field of employment of minors, was repealed and reenacted in an amended form (ch. 11). Hours of labor are specified, certain employments forbidden, certificates required, and duties of the employer outlined.

The Wisconsin Legislature (ch. 143) enlarged its law in regard to the employment of children by further regulating their school attendance.

The Wyoming Legislature (ch. 114) changed the hours of work of women from 8½ per day and 56 per week to 8 per day and 48 per week.

California passed a law (ch. 543) requiring the former employer of a minor to notify the person who issued the work permit that the minor had left his employ.

The Massachusetts Legislature enacted a law (ch. 193) regulating the hours of labor of women employed in the manufacture of leather, making them identical to those in textile manufacturing.

Public works.—Arizona enacted a law declaring that 8 hours shall constitute a lawful day's work on all public works (ch. 12).

California added to the Penal Code a new section (653c-1) limiting the hours of labor on public works to 30 per calendar week during the economic emergency. An exception is made of persons employed on repair work by the State or its municipal corporations or political subdivisions, who may work a maximum of 44 hours per week or 8 hours per day (ch. 632).

In chapter 8 (special session) the Colorado Legislature declared that the maximum hours to be worked on public works shall be in conformity with the Federal regulations.

The Legislature of Hawaii (Act 86) amended section 175 of the Revised Laws of 1925 to the effect that 8 hours shall constitute a day's labor on public works whether employees be laborers, clerks, or others.

New Mexico (ch. 145) provided for an 8-hour day on public works.

Bus drivers.—The hours of labor of operators of motor busses were regulated in several States. While these laws are enacted primarily for the safety of the traveling public, they are given here as a part of the legislation regarding hours of labor in general. The States enacting new laws on this subject are: Arizona (ch. 10, special session), Connecticut (ch. 82), Illinois (p. 855), Indiana (ch. 169), Maine (ch. 259), Minnesota (ch. 170), Nevada (ch. 65), New Hampshire (ch. 106), New Mexico (ch. 61), North Dakota (ch. 164), Ohio (p. 254), Oregon (ch. 429), Rhode Island (ch. 2023), South Dakota (ch. 140), Utah (ch. 53), Washington (ch. 166, secs. 11 and 20), and Wisconsin (ch. 488).

The following States amended the law in regard to the hours of motor bus drivers: California (ch. 801), Iowa (ch. 85), Massachusetts (ch. 372), and Nebraska (ch. 104).

Wages

THE Arizona Legislature enacted a law (ch. 33) enlarging the law requiring semimonthly payment of wages (Rev. Code 1928, sec. 4876), so that it covers every school district and institution of learning within the State. A proviso states that up to January 15, 1935, the operation of the section regarding the medium of payment shall be suspended during any period in which banking business in the State is generally suspended.

In chapter 161 the California Legislature required persons engaged in mining, but not having the fee of the property being worked, to have on hand cash or its equivalent sufficient to pay the wages of every person employed. Chapter 174 added a new section to the Penal Code (sec. 653g) stating that no employment fee shall be charged applicants for employment on public works. Chapter 175 amended section 1204 of the Code of Civil Procedure, giving preference to wage claimants under receiverships. Chapter 548 gives wage claims a preference in the administration of estates of minors or incompetents.

By chapter 235 the Connecticut Legislature made additional restrictions upon the assignment of wages, while chapter 279 (sec. 1119b) requires of certain employers the weekly payment of the wages earned to within 8 days of the date of such payment.

The Indiana Legislature (ch. 47) enacted a law requiring a semimonthly pay day. The Maine Legislature (ch. 65) authorized employers to furnish the overseers of the poor with a statement of the wages paid designated employees applying for municipal aid. The Massachusetts Legislature (ch. 96) added a new section to the law regulating the assignment of wages, specifying that it is not meant to prohibit the deduction of labor, trade-union, or craft dues from an employee's wages upon his written request. Chapter 268 added

a new section to chapter 149, General Laws, 1932, requiring the employer in a factory or workshop to give to each pieceworker, before the pay roll is calculated, a printed or written ticket stating the basis of remuneration.

Three laws were enacted in Minnesota dealing with the general subject of wage payments. Chapter 173 amended sections 4127 and 4128, General Statutes of 1923, so that the law will cover commissions as well as wages. The payment of wages semimonthly in certain employments and upon discharge when transitory employment is terminated is required in chapter 223, while chapter 249 prohibits rebates, etc., by the employee to the employer. In New Mexico a law was passed (ch. 157) providing for a semimonthly pay day for all persons employed by the State.

Oregon, by chapter 279, amended the wage claim law (Acts of 1931, ch. 287), in several respects. In Texas the law requiring a semimonthly pay day (Rev. Civ. Stats. 1925, ch. 3, sec. 5155) was amended to apply to all employers employing one or more persons (ch. 217). Vermont amended section 4970, General Laws of 1917, regarding wages being a first lien on the property of a corporation (ch. 111).

The Wisconsin Legislature, in chapter 473, amended its law in regard to the collection of wages, making violation of the law punishable by a fine or imprisonment or both. The method of procedure in the event of the employer's being declared bankrupt is also outlined.

Wages on public works.—The Arizona Legislature enacted a law (ch. 71) requiring the payment of the prevailing rate of wages on public works.

By chapter 154, California amended section 653d of the Penal Code, making more forceful the law which prohibits the rebating of wages on public works.

The Colorado Legislature enacted chapter 8 (special session), requiring that the minimum wage paid on public works shall be in conformity with the Federal regulations. In chapter 124 it provided that the prevailing rate of wages shall be paid on public works.

Chapter 172 of the Delaware Acts prescribed that the minimum wage rate be paid to laborers on public building contracts. Two laws were passed in Florida (chs. 16300 and 16301) requiring the payment of the prevailing rate of wages on public construction.

The Legislature of Hawaii, by Act 15, amended the law in regard to the payment of wages, making it obligatory to pay weekly the wages of all laborers whose earnings are $5 per day or less.

The law recently enacted in Maine provided for the payment of a minimum wage on all public construction work (ch. 238).

Nevada (ch. 40) provided for the payment of a minimum wage on public works—not less than 50 cents per hour or $4 per 8-hour day.

New Mexico provided for the payment of a prevailing rate of wages on public works (ch. 145). Certain exceptions are specified in the act.

The Oregon law (ch. 357) providing for the development and sale of electrical power has a provision covering labor. The prevailing wage rate is to be paid all employees. In Texas a new law (ch. 45) was enacted regulating the wages on public works and providing that the prevailing wage rate is to be paid. In Utah, chapter 39 prescribed a minimum wage for public works. Vermont provided (ch. 76) that the minimum wage on highway work should be determined by the State highway board. West Virginia enacted a prevailing wage rate law applicable to public works (ch. 57, p. 176), which is in effect only until July 1, 1935. Wisconsin added a section (sec. 348.50) to the prior law regarding the enforcement of an established rate of wage and providing a penalty for violations (ch. 95).

Minimum wages.[4]—In an effort to protect the health and welfare of the workers and equalize the power of the employer and employee in making the wage bargain, the following States enacted laws requiring the payment of wages to women and minors which are reasonable and adequate compensation for the services rendered and which are adequate to supply the proper living and maintain the health and welfare of the worker: Connecticut (ch. 131a); Illinois (p. 597); New Hampshire (ch. 87); New Jersey (ch. 152); New York (ch. 584); Ohio (p. 502); and Utah (ch. 38; H.J.Res. No. 10, proposing a constitutional amendment authorizing minimum wage law for women and minors in Utah).

The Massachusetts Legislature enacted chapter 110, amending the minimum wage law, requiring every employer to keep a record of the names, addresses, occupations, and the wages paid each woman or minor, and to permit the commission to inspect the same. Chapter 220 also amended the minimum wage law by adding sections 11A–11D making it valid for the commission, if an employer continues violating a decree, to cause to be affixed to every article a label stating that such article is manufactured in whole or in part by the labor of women and minors in violation of a decree of the commission. A dealer selling such an article at retail shall keep posted a similar notice.

Garnishment of wages.—The Legislature of Georgia enacted a law (no. 180, p. 35) providing that no garnishment shall issue against the daily, weekly, or monthly wages of any person residing in the State until final judgment has been had against the defendant. This does not affect the garnishment against any debt existing at the time the law was passed.

Illinois (p. 641) amended its law so as to exempt from garnishment the wages of an employee, the head of a family and residing with the

[4] For complete information on this subject see Monthly Labor Review, December 1933, p. 1344.

same, to the amount of $20 per week. In chapter 350, Minnesota exempts from attachment the wages of any person not exceeding $35, plus $5 additional for each dependent, said exemption to be allowed as a right whether claimed or not. New Jersey also amended the law regarding the garnishment of wages (chs. 101 and 102).

Washington, in chapter 15, amended its former law making municipal corporations subject to garnishment only after a judgment has been entered. The procedure outlined in the former act (Acts of 1915, ch. 130) is changed. Wisconsin, in chapter 69, exempted from garnishment 60 percent of the earnings of any person having a family dependent upon him, including the earnings of any minor child, "but not less than $60, nor more than $100 for the month preceding the issue of any writ or attachment * * * and not less than $180 nor more than $300 for the preceding 3 months."

Protection of wages of employees, etc., of contractors.—Delaware enacted a law providing for protection of laborers and materialmen on public works; preference is given to their claims (ch. 169). Hawaii amended the law on this subject, requiring a surety bond instead of the deposit formerly required (Act No. 60). A bond is also required in Idaho (ch. 164), and in Indiana a contractor's bond is prescribed for highway contractors (ch. 18, sec. 12) as well as for contractors on public works (ch. 258). Kansas amended its law (Acts of 1929, ch. 225) on this subject, by chapter 239. The prior law requiring contractors' bonds was repealed and a new law enacted on this subject in Missouri (p. 179), North Dakota (ch. 81), and South Dakota (ch. 93), and a new law was enacted in Wyoming on this subject (ch. 94).

Health and Safety

By chapter 131 Connecticut amended and enlarged its factory-inspection law. The law also covers manufacturing in residences and home workers. The inspection of bakeries was transferred from the commissioner of labor and factory inspection to the dairy and food commissioner by chapter 139.

The Georgia Legislature enacted a law (Acts of 1933, p. 111) to safeguard employees on buildings. In Indiana the legislature passed a law requiring inspection of mines and employment of fire bosses (ch. 41).

In chapter 212 the Kansas Legislature amended sections 49–204, 49–205, 49–215, 49–216, 49–219 of the Revised Statutes of 1923, and repealed section 49–223. The amended sections insure a greater protection of the safety and health of coal miners. The Maine Legislature revised and regrouped the health and welfare laws, with only the minor changes necessary in regrouping (ch. 1).

By chapter 64 the Massachusetts Legislature amended section 13 of chapter 149, General Laws of 1932, providing that the departmen

of labor and industries, instead of the inspector as formerly, shall give notice of changes necessary to comply with the provisions of the health and safety laws concerning the maintenance of proper toilet facilities in industrial establishments. Criminal prosecution shall not be begun until such notice has been received and the required changes neglected.

Minnesota amended section 5490, General Statutes of 1923, in regard to the inspection certificate and the fee charged in inspecting steam boilers (ch. 257).

New Jersey (in ch. 300) provided that the State board of health may appoint inspectors to investigate sanitary conditions in regard to all matters affecting the public health.

Safety codes for mines were adopted in New Mexico (ch. 153). In Oklahoma, chapters 33 and 34 provide for the safety and sanitation of mines. Oregon (ch. 393) provided for steam-boiler inspection under the commissioner of labor.

Pennsylvania amended the safety laws (ch. 221) regarding safety of persons on buildings.

South Carolina enacted a law (no. 116) prohibiting locking buildings with employees therein.

In chapter 137 enacted by the Washington Legislature the coal-mining safety code was amended to insure greater protection to those working in mines.

Wyoming (ch. 34) reduced the number of deputy mine inspectors to one, reduced the salary of the State mine inspector and the deputy, and declared that the office of the deputy shall be located at Sheridan in the future. In chapter 40 the Wyoming Legislature prohibited the use of certain types of internal-combustion engines in coal mines. Chapter 48 limited the employment of a mine foreman to mines employing 5 or more persons. Chapter 52 provided for the quarterly inspection of mines employing 5 or more men, instead of 10, as formerly. Chapter 116 declared that no regulations concerning the duties of the commissioner of labor shall be construed to be applicable to coal and metalliferous mines and workshops.

A law regulating bakeries and the preparation and distribution of food products was enacted in Pennsylvania (Act No. 168); and Indiana (ch. 62) amended the law on this subject. Sanitary rules and regulations regarding barbering enacted by Texas in 1931 were amended by chapter 235 of the Texas Acts, and Michigan also amended its law (no. 106).

Sunday Labor or 1 Day's Rest in 7

By an act of Congress (47 Stat. L. 750) barbers' shops in the District of Columbia are required to remain closed 1 day in every 7 days, beginning at midnight or sunset.

In Maine the Sunday labor law was amended (ch. 161) so as to allow the operation of airplanes on Sunday and chapter 245 legalized Sunday sports. The public local laws of Maryland were amended so as to allow motion pictures on Sunday in Allegany County (ch. 180) and Baltimore City (ch. 534).

The Massachusetts Legislature (ch. 225) excepted from the operation of the law requiring 1 day's rest in 7 those employed as janitors, and employees whose duties include no work on Sunday except setting sponges in bakeries, caring for live animals, caring for machinery, preparing or delivering newspapers, farm or personal service, or any emergency labor. In Massachusetts amusement enterprises at amusement parks and beach resorts may be operated on Sunday (ch. 309). The law was also amended in other respects (ch. 150). The Wisconsin "Sunday blue law" was repealed (p. 1297) after a referendum in 1932.

New Hampshire (ch. 130) prohibits the making up of time lost on account of a holiday by working overtime. Sunday labor in certain employments is prohibited—1 day's rest in 7 is also provided for.

Holidays

TEN States amended the holiday laws during the 1933 sessions of the legislatures. Alabama, by Act No. 173, extra session, designated October 12 as a holiday to be known as Columbus Day and Fraternal Day; the holiday formerly designated as Fraternal Day was abolished. In Arkansas the first Saturday in December is designated as Arbor Day (Act No. 27). General amendments were made to the laws establishing holidays in California by chapter 28, in Colorado by chapter 103, and in Utah by chapter 32.

Florida reenacted the holiday law so as to include Armistice Day and Columbus Day (ch. 16067). Massachusetts passed a law (ch. 260) allowing the people of Suffolk County to vote on the question of making June 17 a holiday. In Nevada (ch. 144) "Nevada Day", October 31, was designated as a holiday. New Jersey reenacted its law in regard to legal holidays. Oklahoma made Jefferson Day, April 13, a legal holiday (ch. 92).

October 12 was declared to be a holiday in Wisconsin and was designated "Landing Day" to commemorate the landing of Columbus (ch. 41).

Mechanics' Liens

THE mechanics' lien laws of some of the States were changed by legislative acts of the State legislatures. General amendments providing for additional liens on property for the value of labor expended or a change in the procedure to be followed were enacted in Alaska (chs. 113 and 118) and the States of Illinois (p. 701) and Vermont (ch. 111). In Delaware the lien law was amended to allow a person

entitled to a lien to maintain a personal action for the same debt (ch. 159). Indiana provided for a laborers' lien on work on drainage ditches, etc. (ch. 264, sec. 38); Iowa provided for a lien on grain and seed threshed and corn shelled (ch. 168); New Jersey provided a lien for labor or materials furnished for public improvements, in chapter 227; North Dakota amended the law in regard to a lien for repairs of personalty (ch. 146), and provided for a lien for labor, fertilizer, or seed used in producing sugar-beet crops (ch. 147). Washington amended the law allowing a lien upon crops to allow a lien for work done in hauling harvested crops to any warehouse (ch. 32), and also amended it in regard to the lien on crops harvested (ch. 119). Wisconsin, by chapter 316, broadened the provisions of the law allowing a lien for labor and material on public works. In Wyoming the lien law was amended by chapter 11 to allow a thresher, hay bailer, and combine operators' lien.

Convict Labor [5]

DURING the year 1933 many State legislatures considered the question of prison-made goods. The Hawes-Cooper Act (45 Stat. L. 1084), which became effective on January 19, 1934, divests convict-made goods of their interstate character. The following States passed laws during the year taking advantage of this law and regulating the sale, etc., of prison-made goods: Arizona (ch. 103), Arkansas (Act No. 253), California (ch. 636), Colorado (ch. 53), Idaho (ch. 216), Indiana (ch. 269), Iowa (ch. 50), Montana (ch. 172), New Hampshire (ch. 42), North Carolina (ch. 146), Ohio (p. 72), South Dakota (ch. 158), Utah (ch. 68), and Washington (ch. 178).

In addition to the above legislation, the following States authorized the manufacture of automobile license plates or road signs in the State penitentiary: Colorado (ch. 135), Missouri (p. 329), New Mexico (ch. 5), North Dakota (ch. 243), Texas (ch. 178), and West Virginia (ch. 4). In South Carolina convict labor may be used in the upkeep of highways and public property (chs. 289 and 380). The following States established the State-use system in prison industries: California (ch. 640), Colorado (ch. 149), New Mexico (ch. 24), Utah (ch. 67), and Virginia (ch. 62, extra session).

Arkansas created a "board of penal institutions" to control, manage, and operate the State penal institutions (ch. 30). California (ch. 888), Indiana (ch. 18), North Carolina (ch. 146), Oklahoma (ch. 123), and Virginia (ch. 62, extra session) provided for the use of convicts in the construction, etc., of highways.

Florida provided for the use of convict labor in cultivating sugar cane (ch. 16182). Georgia restricted the use of convicts in certain counties (Acts No. 135, p. 122, and No. 168, p. 123). Michigan also

[5] For text of these laws see Bureau of Labor Statistics Bul. No. 596: Laws relating to prison labor in the United States.

amended the prison-labor law (nos. 191, 193, 194). Minnesota fixed the price of agricultural implements and binder twine manufactured by prison labor (ch. 342). North Dakota authorized the establishment of a tannery at the State prison (ch. 51) and also sanctioned the manufacture of coffins at the penitentiary (ch. 242), while Virginia authorized certain expenditures in conducting a prison industry (ch. 32, extra session).

Vocational Rehabilitation

OREGON and Washington amended the law dealing with Federal and State cooperation in vocational rehabilitation. Oregon (ch. 85) amended sections 35–311 and 35–312, Code of 1930; Washington established a division of vocational rehabilitation under the State board of vocational education; provisions of the Federal act were accepted and a program is outlined (ch. 176).

Cooperative Associations

Two States and the Territory of Hawaii enacted legislation amending the laws regarding cooperative associations. Hawaii, by Act No. 179, amended the law previously adopted so as to place no limitation on the holdings or indebtedness of such associations. Minnesota, by chapter 148, amended the law regarding the organization and powers of cooperative associations; by chapter 199 renewed the corporate existence of certain cooperative associations; and by chapter 330 amended the law regarding officers, bylaws, and amendment of articles, etc., of cooperative associations. Oregon amended the law regarding the election of officers (ch. 4) and the filing of amendments of articles, etc., of such associations (ch. 38). In Arkansas the duties of the commissioner of mines, manufactures, and agriculture with reference to cooperative associations were transferred to the secretary of state (ch. 153).

Credit unions.—California (ch. 41) amended the credit-union law. Indiana (ch. 40, pt. VI), enacted a new act regarding credit unions. The Kansas law was amended to provide for supervision by the bank commission and the payment of a fee therefor (ch. 154). The Massachusetts law was amended regarding the bonding of certain officers and the making of loans by them (ch. 163). The credit-union law of Minnesota was amended (ch. 346) and new laws were enacted by Pennsylvania (Act No. 260) and Washington (ch. 173).

Retirement and Pensions

Old-age pensions.[6]—During the year 1933 mandatory old-age pension laws were enacted in the following States: Arizona (ch. 34); Arkansas (Act No. 271); Colorado (ch. 144 reenacted in an amended form the law adopted at a prior date which had been declared uncon-

[6] For further information on old-age-pension legislation see Monthly Labor Review, October 1933, p. 854.

stitutional); Indiana (ch. 36); Maine (ch. 267); Michigan (no. 237); Nebraska (ch. 117); North Dakota (ch. 254); Ohio (by referendum, November 7, 1933); Oregon (ch. 284); Pennsylvania (ch. 64, special session); Washington (ch. 29).[7] The Territory of Hawaii also enacted an old-age pension law (ch. 208).

The Arkansas law has been declared unconstitutional by the State supreme court because of the 1 percent tax levied on State and county expenditures to raise the necessary funds.

The following amendments were enacted by States operating under an old-age pension system adopted prior to 1933. California amended the State old-age pension law in regard to the investigation of applicants (ch. 840). Massachusetts amended the law relative to the eligibility of a person for a pension by changing the residence requirement (ch. 219), and created a board of appeal (ch. 285). The law was further amended to allow reasonable exceptions to the provision requiring continuity of residence (ch. 328).

The Minnesota law was changed from a voluntary to a mandatory law, by chapter 348, and chapter 308 further amended the law by setting forth the maximum expenditures allowed. In Wisconsin the law was amended in regard to the effective date of the compulsory provisions of the law (ch. 375).

Although an amendment to the Missouri constitution was passed in 1932 authorizing the enactment of an old-age pension law, no law was passed in that State in 1933.

Mothers' pensions.—The laws providing for mothers' pensions were amended in five of the States and Alaska.

In Alaska (ch. 89) the law was amended regarding the prerequisites for receiving aid under the law. The Illinois law was amended (p. 194) as to the method used in raising the funds for providing mothers' assistance. Minnesota amended the law providing for assistance to dependent and neglected children (ch. 204), and by chapter 367 provided a maximum amount that may be spent on mothers' assistance. Montana (ch. 133) amended the law on this subject. Nebraska (ch. 133) provided for a tax to provide funds for mothers' pensions, and Pennsylvania provided that unpaid grants should be paid to a responsible person on death of the mother (Act No. 197), while in Act No. 218 appropriation is made for the mothers' pension fund and the basis of distribution determined.

Puerto Rico enacted a law (no. 17, first special session) providing for payment of mothers' pensions.

Unemployment Insurance

THE Wisconsin Legislature, by chapter 186, amended its unemployment insurance law, postponing the effective date indefinitely.

[7] Chapter 55 provides that the proceeds from the tax on horse racing shall constitute the old-age pension fund.

Chapter 383 further amended the unemployment reserve and compensation act in several respects.

Antiunion Contract and Anti-injunction Laws

THE following States passed laws declaring antiunion contracts illegal: California (ch. 566); Colorado (ch. 59); Idaho (ch. 215); Illinois (p. 588); Indiana (ch. 12); Massachusetts (ch. 351); Minnesota (ch. 416); Oregon (ch. 355); Pennsylvania (ch. 219); and Utah (ch. 15).

Section 77 of the Federal Bankruptcy Act, as amended (47 Stat. 1467), prohibits antiunion contracts.

The States of Colorado (ch. 59), Idaho (ch. 215), Indiana (ch. 12), Minnesota (ch. 416), Oregon (ch. 355), Utah (ch. 15), and Wyoming (ch. 37) enacted anti-injunction laws. These laws are modeled on the Federal act and prohibit the use of an injunction in a labor dispute except under the conditions outlined in the acts.

Investigative Commissions

A COMMISSION has been created in Alaska (ch. 85) to study the subject of child welfare and to recommend a program for care of children.

In California a commission was created (S.C.Res. No. 14, ch. 95) to investigate the advisability of establishing a State hospital for persons injured in the course of their employment in the mining industry.

Several of the States created special commissions to study the question of unemployment insurance as well as the general problem of unemployment, viz: Colorado (H.J.Res. Nos. 9 and 35); Illinois (p. 587); Maine (ch. 155—Resolve); North Carolina (J.Res. No. 38); and Oregon (H.J.Res. No. 21).

In Massachusetts the special commission on the stabilization of employment was revived and continued by Resolve No. 50; a joint committee on uniform labor laws was created (Res. No. 44); and by Resolve No. 33 a special commission was created to investigate the advisability of licensing contractors and builders.

A mining investigation commission was created in Illinois (p. 139) to investigate the methods and conditions of mining in the State, with special reference to the safety of human lives and property.

Labor Departments, etc.

IN ARKANSAS the department or bureau of mines, manufactures, and agriculture was abolished, effective January 1, 1935, and the duties of the commissioner of that department with reference to cooperative associations were transferred to the secretary of state (ch. 153).

The Colorado Legislature (ch. 37) reenacted the law establishing the State administrative departments. The act abolishes the following: Commissioner of labor statistics, deputy labor commissioner, department of factory inspection, wage claim bureau, chief inspector of steam boilers, and the minimum wage commission. A new division, called the "division of industrial relations" was created, and its duties outlined. In chapter 48, the Colorado Legislature authorized the governor to abolish, either temporarily or permanently, the bureau of mines.

In chapter 128 the Connecticut Legislature accepted the provisions of the Federal act establishing national employment offices, and vested the department of labor and factory inspection with the powers necessary to cooperate with the United States Employment Service.

The Connecticut Legislature (ch. 129) authorized the inspection and investigation of wages, hours of employment, and living expenses of wage-earning women and girls by the bureau of labor statistics.

The Massachusetts Legislature repealed several sections of chapter 23, General Laws of 1932, thus abolishing the Massachusetts Industrial and Development Commission in the Department of Labor (ch. 73).

Michigan amended the law relating to the board of mediation and conciliation (No. 17).

In Nebraska a child welfare bureau was created, under the administration of the governor, to promote child welfare and enforce laws enacted to protect children (ch. 123).

In Nevada, chapter 137 amends the law creating the bureau of mines. Chapter 159 provides that the State highway department must cooperate with the State labor commissioner in enforcing certain labor laws regarding work on highways.

New Mexico (chs. 146 and 147) amended the law (Acts of 1931, ch. 9, secs. 6 and 14) relative to the annual report of the labor commissioner and the general duties of the labor and industrial commission.

North Carolina (ch. 244) amended the law clearly to define the duties and powers of the commissioner of labor.

In North Dakota, the office of commissioner of immigration was abolished and records and duties transferred to commissioner of agriculture and labor (ch. 190). The law creating the State industrial commission was amended by chapter 191.

Oregon amended the law authorizing the inspection of mills, factories, etc., to provide for an inspection fee (ch. 213). Chapter 214 provided for the disposition of funds collected as fees by the bureau of labor, etc. A State mining board was created (ch. 292) and its duties and powers defined. In chapter 393 the powers and duties of the commissioner of labor were defined.

Pennsylvania amended its law relating to inspection of coal mines and colleries (ch. 129). The law authorizing the inspection of coal mines was amended to provide for inspection in mines where 2 to 5 persons are employed (Nos. 44 and 45, special session).

In South Dakota the law regarding the appointment of the industrial commissioner was amended (ch. 208).

The Washington Legislature (ch. 172) created a division of child welfare under the department of business control.

The Wyoming Legislature (ch. 132) created a department of commerce and industry.

Miscellaneous

Four jurisdictions—Colorado (ch. 79), Indiana (ch. 112), and Wisconsin (ch. 53), and the Territory of Hawaii (Act No. 139)—passed amendments to the wrongful-death statutes during the year 1933. Many measures were adopted to provide assistance and relief to the unemployed, novel ideas being embodied in such legislation. Hawaii (ch. 209) provided for the relief of the unemployed by creating a fund derived from a tax on salaries, wages, and dividends; Indiana (ch. 266) established a cooperative plan for employment and assistance, and provided for the issuance of scrip and trade certificates. In Wisconsin a resolution (J.Res. No. 70) was passed urging the use of hand labor rather than machines whenever possible in highway construction; a somewhat similar provision was enacted by Colorado (ch. 8, extra session), requiring that a maximum of human labor be used in lieu of machinery in the construction of public works, wherever consistent with sound economy.

Minnesota adopted a resolution (Res. No. 16) urging that a suitable part of public employment be given physically handicapped persons. California enacted a law to aid indigent residents not eligible for assistance under the State old-age pension law (ch. 761).

Attention has recently been focused on housing problems, and several of the States have enacted housing laws establishing State agencies to advance the general welfare by promoting safety and sanitation in dwellings, providing reasonable rentals, and making a complete study of housing conditions both in rural and urban communities. The following States enacted laws on this subject during the year 1933: Arkansas (Act No. 89), California (ch. 353, amends prior law on this subject), Delaware (ch. 61), Illinois (p. 396), Kansas (ch. 225), Massachusetts (ch. 364), New Jersey (ch. 444), Puerto Rico (J.R. No. 47), and South Carolina (No. 143).

North Dakota enacted a law (ch. 221) which compels common carriers by railroad to maintain a full crew on all trains.

Laws providing for the protection and registration of trade-union emblems were enacted in five States: California (ch. 409), Maryland

(ch. 343), Minnesota (ch. 295), New Mexico (ch. 167), and Oregon (ch. 27).

The States of Illinois (p. 210), Missouri (p. 190), Nebraska (ch. 21), Oregon (chs. 219, 280, 281, and 450), and Washington (ch. 102) amended the laws providing for assistance to the blind.

Preference is given to local labor and domestic material in public works in many of the States. During the year 1933 the following States and Territories took some action on this subject: Alaska (ch. 111), Arizona (ch. 12, amends former law), Arkansas (Act No. 261), California (ch. 226), Colorado (ch. 122), Delaware (ch. 170), Florida (ch. 16183), Georgia (Res. No. 34, p. 1178), Hawaii (Act No. 150), Idaho (ch. 111), Maine (ch. 238), and Maryland (J.Res. Nos. 8 and 9), Minnesota (ch. 17 repeals Gen. Laws 1915, ch. 211, relating to preference of Minnesota material in construction of public buildings, ch. 18 repeals law requiring fabrication of cut stone in State), New Mexico (chs. 19, 50, 68, and 150), North Dakota (ch. 126), Pennsylvania (Act. No. 172), Rhode Island (ch. 2030), Vermont (ch. 75), and Washington (chs. 34 and 179).

The Colorado Legislature (ch. 6, extra session) enacted a law suspending the blacklisting and boycotting law "for the purpose of cooperating with, and assisting the national Government in promoting its national industrial recovery program."

The Legislature of Maine (ch. 108) amended Revised Statutes of 1930, chapter 138, section 27, making the maintenance of a blacklist punishable by fine or imprisonment.

Massachusetts (ch. 272) legalized peaceful picketing. Oregon (ch. 459) amended and reenacted the law dealing with sabotage and criminal syndicalism. Missouri (p. 229) amended Revised Statutes of 1929, article 14, chapter 61, by adding a new section (sec. 1047a) guaranteeing to employees freedom in political activities.

Public-service employments are covered by chapters 372 and 409 of the Minnesota acts, the former restricting the civil service and the latter prescribing rules, etc., regarding discharge and demotion of civil-service employees. Florida (ch. 16088), Montana (ch. 12), and North Dakota (ch. 194) enacted laws to prevent the practice of employing relatives by public officials in the State.

The Iowa Legislature (ch. 144) repealed and reenacted its group insurance law (see Code of 1931, ch. 399).

South Carolina passed a law (no. 269) declaring that when cotton, rayon, or textile plants are closed down for more than 2 weeks, the operatives shall not be charged house rent, water or electric light services during the period of such shutdown.

Right to Challenge Hawes-Cooper Convict Labor Law Denied by Court

THE application of Alabama for permission to file a bill challenging the statutes enacted by five States under the authority granted in the Hawes-Cooper convict labor law was denied by the United States Supreme Court in a decision rendered February 5, 1934. (*Alabama* v. *Arizona et al.*, 54 Sup. Ct. 399).

The Hawes-Cooper convict labor law (45 Stat. 1084) enacted by the Federal Congress in 1929 divests prison-made goods of their interstate character, thereby allowing the various States to pass laws regulating or prohibiting the sale of such goods within the State. The law became effective January 19, 1934.

According to the original bill filed by counsel for Alabama, 19 States had enacted laws either prohibiting or regulating in some form the sale of prison-made goods. At the hearing on the bill the question was raised as to whether the States were improperly joined and the bill was amended by eliminating 14 States, leaving only Arizona, Idaho, Montana, New York, and Pennsylvania. Each of these 5 States had enacted laws forbidding the sale upon the open market of any goods produced wholly or in part by convicts of other States and prescribing penalties for violation.

The complaint filed by Alabama alleged among other things that Alabama's prison population averages about 5,500 and that "in connection with its prisons it has agricultural lands, cotton mills, and a shirt factory." The State entered into a contract with a manufacturing company for the sale of the cotton goods manufactured in the cotton mills and for the hire of convicts to be employed in the prison shirt factory at the rate of 75 cents per dozen shirts. The contract expired March 31, 1933, and the company declined to renew or extend it.

The State of Alabama received approximately $1,000 for the goods sold in Arizona, $10,000 for those sold in Idaho, $10,000 in Montana, $30,000 in New York, and $25,000 in Pennsylvania. Continuing, the complaint alleged:

> Alabama's investment in the cotton mills and shirt factory exceeds $300,000 and will be valueless as a result of its inability to find an employer for its convict labor and a market for its prison-made goods. The cost of maintaining unemployed convicts will be about $550,000 annually.
>
> If Alabama is compelled to provide other employment, it will have to expend about $1,000,000 for the construction of plants for the manufacture of things to be used by the inmates of its eleemosynary institutions and in and about other State activities. As presently employed its prisoners are divided into night and day shifts so as to avoid overcrowding of the prisons. And, if the State does not provide other industrial activities it will have to expend about $100,000 for additional space to house its convicts.

The State of Alabama contended that the law was in violation of the commerce clause in the Federal Constitution and that it deprived the State of property without due process.

The first question decided by the Court was whether the States were properly joined as defendants in the suit. It was pointed out that if the Court held the statute assailed invalid and enjoined its enforcement in one of the States, the decision would be authoritative and controlling as a precedent in all the States and "no other State would attempt on similar facts to enforce a like measure", and Alabama would have no occasion to invoke the jurisdiction of the Supreme Court further. The Court also mentioned the fact that Alabama did not claim any concert of action by the defendant States. It was therefore held that the complaint filed by Alabama was multifarious, there being a misjoinder of parties.

Mr. Justice Butler, in rendering the decision for the Court, cited cases holding that the United States Supreme Court may not be called upon to give advisory opinions or to pronounce declaratory judgments. He also said that "a State asking leave to sue another to prevent the enforcement of laws must allege, in the complaint offered for filing, facts that are clearly sufficient to call for a decree in its favor. * * * Leave will not be granted unless the threatened injury is clearly shown to be of serious magnitude and imminent." Continuing the opinion, Mr. Justice Butler said:

> The burden upon the plaintiff State fully and clearly to establish all essential elements of its case is greater than that generally required to be borne by one seeking an injunction in a suit between private parties.
>
> Plainly the amended bill does not meet the requirements that reasonably should be imposed upon the applicant. It fails to show that Alabama has any agreement with any defendant or that there is any direct issue between them or that the validity of the statutes in question and Alabama's assertion of right may not, or indeed will not, speedily and conveniently be tested by the contracting company, that apparently is directly concerned, or by a seller of such goods. There is no allegation that an adequate market for the goods in question may not be found outside the five States named. The facts alleged are not sufficient to warrant a finding that the enforcement of the statutes of any defendant would cause Alabama to suffer great loss or any serious injury. If filed, the bill would have to be dismissed for want of equity.

Leave to file a bill challenging the constitutionality of the law was therefore denied.

LEISURE TIME

The Public School as a Factor in the Utilization of Leisure Time

AT THE present time, when there is more leisure for the majority of people than ever before in the world's history and with all signs pointing to still more in the near future, the attention of many is being turned to the problem of the utilization of this free time and the best agencies to be employed for its satisfactory use.

A recent study [1] made for the National Recreation Association deals with the schools as an important factor in the use of leisure time. Since schools are supposed to train for life, and leisure is an increasing segment of life, it was the purpose of this study to ascertain whether the public schools of the country are sufficiently alive to their opportunities in this respect. It is said that the educational world has been evidencing a growing interest in the problem of leisure and in addition a growing concern as to whether the schools are doing all that they can or should do to fit young people to face a comparatively new social situation. The records show that considerable advances have been made in the last quarter of a century, and particularly since the World War, in stressing studies, such as music, dramatics, physical activities, reading, art, and the handicrafts, which are of importance when people use their leisure recreationally. Also, in 1918 when the National Education Association promulgated its "seven objectives of education" one of the seven was "training for the worthy use of leisure." While at first these objectives were connected with secondary education alone they were rather quickly accepted as applicable to all education although, as yet, the schools have not attained a full realization of the possibilities of their use in the training for leisure. It is said, however, that educators have come to see more and more clearly the growth values, particularly the character values, inherent in play and recreation, rightly handled; and by some, the use of the spirit of play, in the creative sense, in the schools is regarded as a psychological necessity for effective education. In addition to the development of this field during school hours the public schools have in many places expanded their programs to take in after-school recreational activities, summer recreation, and general community recreation, although the extent of their use in this manner is dependent upon financial limitations upon school author-

[1] National Education Association. The New Leisure Challenges the Schools, by Eugene T. Lies. Washington, 1201 Sixteenth Street, 1933.

ities and the existence of other leisure-time agencies in individual communities.

Emphasis in the study under review is naturally placed upon leisure in its recreational aspects, since the basic nature of the work of the association is recreation and also because most people do use their free time in recreational ways. The study covered the public schools in cities of 5,000 and over, all grades through the high school being included, and in addition progressive schools under private auspices were taken into consideration insofar as their practices and ideals were affecting the public schools. Personal visits were made to 36 large and small public-school systems, most of which it was known were doing things worthy of study, and questionnaires were sent to 1,448 school systems, usable returns being received from 418.

Preparation for leisure through physical education as a conscious major objective is said to be increasing throughout the public-school system. It was found that 33 of the 36 school systems visited had general directors of physical education, and that 131 out of 399 cities reporting on this point had directors, while 373 of the 399 had a total of 3,836 special teachers. At present 35 States have laws requiring physical education although there are still only 18 State directors and 3 acting directors. In the high-school programs in the advanced school systems it was found that more activities of the types which can be continued in later life were carried on than was formerly the case.

Music, dramatics, and art and handicrafts are activities carried on in the schools which carry over into later life as leisure-time activities, such activities having developed greatly during the past few years. The report states that the number of adult dramatic groups throughout America seems to be growing and points out that such groups offer a splendid opportunity to high school and college graduates with dramatic experience to continue that interest as a leisure-time pursuit. Every community, it is said, should have such groups and the local school and recreation authorities are in a position to aid in bringing them into existence. Auditoriums were provided in some of the schools of all of the 36 school systems visited and it is said to be the present tendency to put them in all new schools.

Evening schools which offer opportunities for adult education, it was found, are not maintained as largely as facilities would warrant. Shops and laboratories of junior and senior high schools offer a great resource which is too little used in the field of adult education. In a number of the cities of the country community centers are maintained parallel with their night schools and in them the tendency is to include opportunities of cultural and recreational types while the regular evening school program is devoted exclusively to academic, vocational, and citizenship courses. On the other hand, in some

places the school authorities prefer not to set up special community centers, and put into the evening school program, therefore, more of the cultural and recreational types of activities in order to meet the wider needs and desires of adults.

In a number of States, the State departments of education have in recent years been vigorously promoting adult education programs, among these States being Pennsylvania, Connecticut, California, Alabama, Delaware, and the District of Columbia. In these localities adult illiteracy is being attacked and general academic and cultural opportunities are being increasingly promoted.

It is stated in the report that in general there is a gradually growing sentiment among school authorities in favor of extension of the service of school systems to the adults of the community. This is based on economic, educational, and sociological reasons. On economic grounds it is considered that greater use should be made of the costly school plants than is done by conducting only the regular day program; on educational grounds it is the view that youth and adults are educable beyond the intellectual status which they have attained at any particular time and the school system should provide opportunities, therefore, for those who wish them no matter what their age; while on sociological grounds the view is held that there is "need of effort to substitute integrating for the many present-day disintegrating forces in society, also to promote neighborliness and cooperation, to enhance happiness and health, to provide opportunity, under informal conditions and in an atmosphere of freedom, for indulging in activities that shall give satisfaction to thwarted personalities, to those who desire self-expression and enlargement in physical, mental, manual, and aesthetic pursuits."

School systems in 16 of the 36 cities visited were conducting community centers on an organized basis. In 10 of these cities the centers were regarded as part of the year-round recreation facilities and in 6 as special or seasonal recreation places. In general the programs offered were intended largely for young persons and adults who were not attending the regular day schools. The number of cities offering the different activities were: Physical recreation, 16 cities; social activities, 13; music, 12; dramatics, 10; handicrafts, 10; art, 5; motion-picture entertainments, 7; sewing, 6; literary activities, 6; lectures, 5; cooking, 2; and nature study, 2. The number of different activities offered in the individual cities ranged from 1 to 10.

In four cities—Cleveland, Kansas City, New York City, and Washington, D.C.—all recreation centers were found to have connected with them active citizen groups having varying degrees of authority and responsibility; Newark, N.J., had citizens' organizations in 6 of its 28 centers and in Lansing, Mich., they were in the process of development. In 10 cities there were no such organizations.

Twenty school systems of the 36 cities specially studied were found to be conducting summer recreation activities, all but one of which catered to adults as well as to children. In all of the 19 cities providing for adult recreation, programs of physical activities were offered but other types of activities were not well represented. As a result, the summer recreation programs of adults were, in general, meager and poorly balanced, so that they were not meeting the broad and varied leisure-time needs of the adults of these cities.

Fifteen of the thirty-six school systems were serving adults on a year-round basis, although in only six of these cities was there much attempt to serve the various citizen groups in the community and the individual homes, by providing play leadership in churches, fraternal organizations, clubs, industrial plants; forming leagues of business and industrial sports clubs; furnishing counsel to homes on backyard play and indoor recreation possibilities, and to various organizations along dramatic and musical lines; providing play equipment for picnics; and holding institutes for amateur leadership training.

Community recreation, catering to both adults and children, was carried on in 18 of the 36 cities on a year-round basis by agencies other than the schools, usually under local government auspices. In 6 of these cities the schools also were conducting year-round recreation simultaneously. In 4 others community recreation was conducted during the summer only by other agencies than the schools. In only 2 cities—Kansas City and Sioux Falls—neither the schools nor outside agencies were carrying on all-year or summer recreation programs. In addition to such tax-supported agencies there are in most of the cities organizations such as the Young Men's and the Young Women's Christian Associations which, largely on a paid-membership basis, cater to adults' leisure-time needs.

In summing up the objectives which should be striven for in every community recreation system, it is said that it should be the aim to serve people of all ages; the service should function for the entire year and not during the summer or some other season only, and it should include special advisory service and at times also leadership for homes, institutions, and organizations. Community centers with both indoor and outdoor facilities should be located at strategic points and facilities should be provided for games and sports. It is considered that it should be possible to draw freely upon the school facilities while arrangements should also be made to utilize special facilities in churches, clubs, etc., at least occasionally if not throughout the year. It is regarded as desirable that some division of the city government should be in control of the community recreation system although whether that division should be the park department, the board of education, or a special recreation commission, it is said, depends upon a variety of factors in the individual community.

NATIONAL INCOME

The National Income, 1929–32

A NEW series of basic estimates of the national income was submitted to the United States Senate in response to Senate Resolution No. 220, Seventy-second Congress, by the Bureau of Foreign and Domestic Commerce in January 1934. The study, which required over a year of intensive research, was prepared with the active cooperation of the National Bureau of Economic Research, Inc.

Pending publication of the full report, the following summary was prepared by the Department of Commerce:

The figures presented below are subject to slight modification, and all 1932 data are preliminary. In utilizing these estimates care should be taken to note the following: 1. Data are, insofar as possible, for the continental United States. 2. Certain items that might be classified as income under concepts other than those employed by the investigators have been excluded from the totals presented, i.e., imputed income from ownership of durable goods (including owned homes), the imputed value of services of housewives and other members of the family, earnings from odd jobs, relief and charity, earnings from illegal pursuits, and changes in value of assets not derived by groups professionally occupied in the handling of assets.

The total income distributed to individuals throughout the Nation was 81 billion dollars in 1929, 75.4 billion in 1930, 63.3 billion in 1931, and 49 billion in 1932, a decline of 40 percent between 1929 and 1932. Income produced in each of these years amounted to 83, 70.5, 54.7, and 38.3 billion dollars, respectively, with the decline from 1929 to 1932 amounting to 54 percent. The income distributed by industries in 1929 was less than that produced to the extent of 2 billion dollars, this amount being retained by corporate and individual enterprises. In the following years, however, the amount distributed exceeded the amount produced, a draft being made upon previously accumulated surpluses and assets; such withdrawal of income exceeded income produced in 1932 by 10.6 billion dollars.

The study indicates that labor income amounted to about 53 billion dollars in 1929, accounting for 65 percent of the total income distributed. Property income and entrepreneurial income in the same year each amounted to slightly over 12 billion dollars, or 15 percent of the total, while net rents made up the remaining 5 percent. The total figures also include the net flow of international income payments.

Wages have suffered the most severely in the general decline since 1929, with a falling off of 60 percent in those industries in which it was possible to segregate this item. Salaries dropped 40 percent, much less rapidly than wages, with the most severe curtailment occurring in 1932. A significant divergence in declining trends is apparent as between labor income and property income; by 1932 the former had fallen off 40 percent, while property income distributed receded but 30

percent. This situation was brought about by the maintenance of interest payments rather uniformly up to 1932, with only a small decline then. Dividend payments were well maintained in 1930, but declined thereafter more rapidly than labor income.

Manufacturing was the largest industrial class contributing to income, accounting for 22 percent of the total distributed in 1929. Trade, finance, and services followed in order, accounting for 14, 12, and 11 percent of the total, respectively.

The decline in income distributed was most severe in the construction industry, the 1932 volume being but 28 percent of the amount paid out in 1929. Income in mining fell off about 60 percent and in manufacturing about 55 percent in the 4-year period. In the manufactures group, the construction materials and metals and metal products sections declined most severely, 70 percent and 67 percent, respectively. It will thus be seen that the greatest declines have taken place in the durable-goods industries.

The general downward trend was least severe in the field of government (in which expansion of employment and bonded indebtedness slightly raised income payments), electric light and power and gas, communications, and food and food products manufacture.

TABLE 1.—NATIONAL INCOME, PAID OUT AND PRODUCED, 1929-32 [1]

Item	Amount (millions of dollars)				Index numbers (1929=100)		
	1929	1930	1931	1932	1930	1931	1932
Income paid out	81,040	75,438	63,289	48,952	93.1	78.1	60.4
Business savings or losses	1,998	−4,955	−8,639	−10,603			
Income produced	83,037	70,484	54,652	38,349	84.9	65.8	46.2
U.S. Bureau of Labor Statistics:							
Cost-of-living index					97.4	88.9	80.4
Wholesale-price index					90.7	76.6	68.0

[1] Subject to minor corrections.

TABLE 2.—NATIONAL INCOME PAID OUT, BY TYPES OF PAYMENT, 1929-32 [1]

Type of payment	Amount (millions of dollars)				Index numbers (1929=100)		
	1929	1930	1931	1932	1930	1931	1932
Salaries (selected industries)[2]	5,702	5,660	4,738	3,382	99.3	83.1	59.3
Wages (same as in line 1)[2]	17,180	14,209	10,541	6,839	82.7	61.4	39.8
Salaries and wages (all other industries)	29,129	27,902	24,759	20,367	95.8	85.0	69.9
Total labor income [3]	52,867	48,688	41,027	31,595	92.1	77.6	59.8
Dividends	5,963	5,795	4,311	2,590	97.2	72.3	43.4
Interest	5,687	5,826	5,662	5,506	102.4	99.6	96.8
Total property income [4]	12,215	12,238	10,508	8,489	100.2	86.0	69.5
Net rents and royalties	3,835	3,237	2,494	1,691	84.2	65.0	44.1
Entrepreneurial withdrawals	12,121	11,275	9,259	7,181	93.0	76.4	59.2
Total entrepreneurial income	15,956	14,512	11,753	8,872	91.0	73.7	55.6
Total income paid out	81,040	75,438	63,289	48,952	93.1	78.1	60.4

[1] Subject to minor corrections.
[2] Include mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.
[3] Includes also employees' pensions and compensation for injury.
[4] Includes also net balance of international flow of property incomes.

TABLE 3.—INCOME PAID OUT, BY INDUSTRIAL DIVISIONS, 1929-32 [1]

Industrial division	Amount (millions of dollars)				Index numbers (1929=100)		
	1929	1930	1931	1932	1930	1931	1932
Agriculture	6,341	5,707	4,500	3,442	90.0	71.0	54.3
Mining	2,123	1,776	1,285	851	83.6	60.5	40.1
Electric light and power and gas	1,306	1,503	1,461	1,216	115.1	111.9	93.1
Manufacturing	18,157	16,141	12,488	8,373	88.9	68.8	46.1
Construction	3,135	2,825	1,896	864	90.1	60.5	27.6
Transportation	6,657	6,199	5,233	4,021	93.1	78.6	60.4
Communications	915	950	897	808	103.8	98.0	88.3
Trade	11,238	10,424	9,103	7,326	92.8	81.0	65.2
Finance	9,778	9,038	7,761	6,019	92.4	79.4	61.6
Government	6,459	6,764	6,793	6,794	104.7	105.2	105.2
Service	8,643	8,198	6,959	5,434	94.9	80.5	62.9
Miscellaneous	6,288	5,913	4,913	3,804	94.0	78.1	60.5
Total	81,040	75,438	63,289	48,952	93.1	78.1	60.4

[1] Subject to minor corrections.

Income Reported for Income-Tax Purposes in 1932

INCOME-TAX returns for 1932 show that, of the total number of returns filed, slightly over 90 percent represented net individual incomes of under $5,000 in that year, and that this class represents almost 64 percent of the total net income.[1]

The following table gives the distribution of individual returns for 1932 by net classes, showing number of returns and net income:

DISTRIBUTION OF INDIVIDUAL RETURNS FOR 1932, BY NET INCOME CLASSES SHOWING NUMBER OF RETURNS AND NET INCOME

Net income classes	Returns			Net income		
	Number	Percent of total	Cumulative percentage	Amount	Percent of total	Cumulative percentage
Under $5,000 (estimated)	3,420,995	90.974	90.974	$7,112,000,000	63.58	63.58
$5,000 and under $10,000	237,273	6.310	97.284	1,594,995,285	14.26	77.84
$10,000 and under $25,000	77,045	2.049	99.333	1,127,225,987	10.08	87.92
$25,000 and under $50,000	17,658	.470	99.803	601,257,813	5.38	93.30
$50,000 and under $100,000	5,644	.150	99.953	376,214,524	3.36	96.66
$100,000 and under $150,000	962	.025	99.978	116,117,954	1.04	97.70
$150,000 and under $300,000	589	.015	99.993	117,049,448	1.05	98.75
$300,000 and under $500,000	136	.004	99.997	50,947,574	.45	99.20
$500,000 and under $1,000,000	80	.002	99.999	54,451,168	.48	99.68
$1,000,000 and over	20	.001	100.000	35,239,556	.32	100.00
Total	3,760,402	100.000		11,185,499,309	100.00	

According to the cumulative percentages covering number of returns, 99⅓ percent of all returns filed for 1932 represent incomes of less than $25,000 per year. Only 100 incomes are reported in the brackets of $500,000 and over as compared with 221 in 1931, 468 in 1930, and 1,489 in 1929.

The total amount of income for 1932 on a cumulative percentage basis is highly concentrated in the intervals up to $50,000 per year with 93.3 percent of the total falling below that amount.

[1] U.S. Treasury Department. Office of Internal Revenue. Statistics of income for 1932 (preliminary report). Washington, 1934. 12 pp.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in January 1934

DATA regarding industrial disputes in the United States for January 1934 with comparable data for preceding months are presented below. Disputes involving fewer than 6 workers and lasting less than 1 day have been omitted.

Table 1 shows the number of disputes beginning in each year from 1927 to 1932, the number of workers involved and man-days lost for these years and for each of the months, January 1932 to January 1934, inclusive, as well as the number of disputes in effect at the end of each month and the number of workers involved. The number of man-days lost as given in the last column of the table, refers to the estimated number of working days lost by workers involved in disputes which were in progress during the month or year specified.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY 1932 TO JANUARY 1934, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927 TO 1932

Month and year	Number of disputes—		Number of workers involved in disputes—		Number of man-days lost in disputes existing in month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927	734	----------	349,434	----------	37,799,394
1928	629	----------	357,145	----------	31,556,947
1929	903	----------	230,463	----------	9,975,213
1930	653	----------	158,114	----------	2,730,368
1931	894	----------	279,299	----------	6,386,183
1932	808	----------	242,826	----------	6,462,973
1932					
January	87	37	12,091	4,993	132,873
February	56	34	33,713	31,103	460,701
March	64	30	33,087	13,937	736,782
April	89	44	19,187	21,513	620,866
May	87	52	44,357	49,777	1,251,455
June	69	46	15,858	24,138	943,338
July	66	40	20,890	33,216	740,785
August	85	38	28,492	27,717	754,423
September	85	33	17,824	7,456	566,045
October	47	23	10,442	2,324	147,059
November	38	21	3,460	1,896	68,154
December	35	12	3,425	997	40,492
1933					
January	67	29	19,616	8,790	240,912
February	63	32	10,909	6,706	109,860
March	91	41	39,913	12,794	445,771
April	72	46	23,077	19,867	535,039
May	133	49	41,652	16,584	603,723
June	131	45	40,903	24,593	504,362
July	219	68	108,350	49,058	1,404,850
August	198	73	145,635	101,041	1,401,532
September	180	92	235,071	150,210	3,642,431
October	107	67	51,668	94,368	3,067,967
November	56	36	37,137	20,442	1,160,565
December [1]	55	31	33,326	12,430	437,378
1934					
January [1]	56	42	15,933	17,591	451,762

[1] Preliminary figures subject to change.

Table 2 shows in detail by city, State, and industry the number of strikes in January 1934, the number of workers involved, and the man-days lost.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF JANUARY 1934, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in January
	Beginning in January	In effect at end of January	Beginning in January	In effect at end of January	
Bakers:					
Connecticut, Hartford		1		18	468
Missouri, Springfield					[1] 1,075
New York:					
Brooklyn	1		8		8
Rochester	1		7		7
Pennsylvania:					
Pittsburgh	1	1	360	360	5,400
Reading		1		45	1,170
Scranton	1		24		24
Total	4	3	399	423	8,152
Building trades:					
Louisiana, New Orleans	1		150		300
Pennsylvania, Red Lion	1		9		27
Total	2		159		327
Chauffeurs and teamsters:					
Michigan, Flint	1		130		260
Missouri, Kansas City	1	1	15	15	150
New Jersey, Newark	1		350		4,550
New York, New York City		1		800	20,800
Pennsylvania:					
Philadelphia					[1] 7,200
Wilkes-Barre	1	1	78	78	1,170
Total	4	3	573	893	34,130
Clerks and salesmen:					
New York, New York City					[1] 408
Pennsylvania, Philadelphia					[1] 1,140
Total					[1] 1,548
Clothing:					
California, San Francisco	1		350		700
Illinois, Centralia	1	1	450	450	1,350
Massachusetts:					
Boston	1	1	80	80	2,080
Fall River	1	1	38	38	456
Haverhill	1	1	100	100	2,600
Missouri, St. Louis		1		615	13,530
New Jersey, West New York, and South River	1	1	350	350	700
New York, New York City	1	1	150	150	1,200
Pennsylvania, Philadelphia	1		100		800
Wisconsin, Milwaukee	1	1	500	500	6,000
Total	9	8	2,118	2,283	29,416
Coopers:					
Pennsylvania, Philadelphia					[1] 155
Farm labor:					
California, Pescadero	1		200		800
Florida:					
Avon Park		1		3,000	78,000
Lake Wales					[1] 15,000
Total	1	1	200	3,000	93,800

[1] I.e., in strikes which began prior to January and continued into that month, but were not in effect at the end of the month.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF JANUARY 1934, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION—Con.

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in January
	Beginning in January	In effect at end of January	Beginning in January	In effect at end of January	
Fishermen:					
Massachusetts, Boston, Gloucester, and Provincetown	1		400		8,000
Mississippi, Pascagoula	1		75		150
Total	2		475		8,150
Food workers:					
California, Los Angeles	1		150		1,200
Pennsylvania, Philadelphia	1		40		160
Total	2		190		1,360
Furniture:					
Michigan, Grand Rapids	1		22		506
New York, Jamestown	1		274		548
Total	2		296		1,054
Hotel and restaurant workers:					
New Jersey, Lakewood					[1] 320
New York:					
New York City	2	2	1,040	1,040	7,040
Do	1		463		1,852
Pennsylvania:					
McKeesport	1		6		24
Philadelphia	1	1	8	8	24
Total	5	3	1,517	1,048	9,260
Iron and steel:					
Illinois, Alton		1		50	1,550
Ohio, Newton Falls	1		26		26
Total	1	1	26	50	1,576
Jewelry workers:					
New Jersey, Newark					[1] 15,000
Metal:					
Connecticut, Hartford		1		185	4,810
New York, Brooklyn		1		70	1,820
Ohio, Niles	1	1	200	200	1,600
Pennsylvania, Philadelphia	2		25		75
Total	3	3	225	455	8,305
Miners:					
Illinois, Glenridge	1	1	220	220	220
Indiana, Princeton	1		350		2,800
Pennsylvania:					
Hudson		1		750	19,500
Isabella	1		650		3,250
Johnstown	1	1	1,500	1,500	39,000
Lackawanna and Luzerne Counties	1	1	3,000	3,000	45,000
Mocanaqua	1		650		1,950
Revloc	1		600		1,800
Swoyersville	1		1,285		32,125
Total	8	4	8,255	5,470	145,645
Motion-picture operators and theatrical workers:					
Indiana, Elkhart and Goshen	1	1	11	11	341
Oil and chemical workers:					
Pennsylvania, Langeloth		1		427	11,102
Paper and paper-goods workers:					
Pennsylvania, Miquon	1		22		44
Printing and publishing:					
Washington, Wenatchee	1	1	15	15	345
Slaughtering and meat packing:					
Ohio, Cleveland	1	1	500	500	3,000
Street railway workers:					
Kentucky, Lexington	1		75		450

[1] I.e., in strikes which began prior to January and continued into that month, but were not in effect at the end of the month.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF JANUARY 1934, AND MAN-DAYS LOST, BY CITY AND INDUSTRY OR OCCUPATION—Con.

Industry or occupation and city	Number of disputes		Number of workers involved in disputes		Number of man-days lost in January
	Beginning in January	In effect at end of January	Beginning in January	In effect at end of January	
Municipal workers:					
Illinois, Du Page County		1		1,000	26,000
West Virginia, Kanawha County	1	1	500	500	4000
Total	1	2	500	1,500	30,000
Teachers:					
Pennsylvania:					
Mayfield Borough	1	1	32	32	704
Pittston Township		1		30	660
Total	1	2	32	62	1,364
Textiles:					
Massachusetts, Fall River	1		32		96
New Jersey:					
Newton		1		249	5,478
Paterson		1		70	1,820
North Carolina:					
Asheboro		1		180	4,680
Pittsboro	1		90		1,260
Pennsylvania:					
Laureldale					[1] 7,590
Northampton		1		100	2,600
Reading		1		200	5,200
Rhode Island, Pawtucket					[1] 418
Total	2	5	122	799	29,142
Tobacco:					
Pennsylvania, Nanticoke		1		614	15,964
Other occupations:					
Button workers:					
North Carolina, Mount Airy	1		175		1,050
Caddies:					
California, Hillsboro	1	1	7	7	42
Car washers:					
Pennsylvania, Wilkinsburg	1		30		90
Paint workers:					
Ohio, Dayton	1		11		66
Rubber workers:					
Pennsylvania, Philadelphia		1		34	884
Total	4	2	223	41	2,132
Grand total	56	42	15,933	17,591	451,762

[1] I.e., in strikes which began prior to January and continued into that month, but were not in effect at the end of the month.

Occurrence of Disputes

TABLE 3 gives, by industrial groups, the number of strikes beginning in November and December 1933 and January 1934 and the number of workers directly involved.

TABLE 3.—INDUSTRIAL DISPUTES BEGINNING IN NOVEMBER AND DECEMBER 1933 AND JANUARY 1934

Industry or occupation	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	November 1933	December 1933	January 1934	November 1933	December 1933	January 1934
Auto, carriage, and wagon workers	2			698		
Bakers	3	4	4	518	123	399
Building trades	2	1	2	21	40	159
Chauffeurs and teamsters	4	10	4	1,090	14,201	573
Clerks and salesmen	1	2		17	95	
Clothing	3	3	9	251	1,646	2,118
Coopers		2			17	
Farm labor		2	1		4,500	200
Fishermen	1		2	24		475
Food workers	2	2	2	20	1,495	190
Furniture	2		2	140		296
Hotel and restaurant workers		2	5		79	1,517
Iron and steel		2	1		300	26
Jewelry workers	1			600		
Laundry workers		2			197	
Leather	1			650		
Longshoremen	2	1		1,511	150	
Metal trades	2	5	3	111	1,169	225
Miners	5	5	8	21,362	6,020	8,255
Motion-picture operators and theatrical workers	1		1	18		11
Oil and chemical workers		1			427	
Paper and paper-goods workers			1			22
Printing and publishing			1			15
Rubber	1			37		
Slaughtering and meat packing	7		1	4,958		500
Street-railway workers			1			75
Municipal workers	2	1	1	213	1,000	500
Teachers		1	1		30	32
Textiles	9	7	2	2,461	1,189	122
Tobacco		1			614	
Other occupations	5	1	4	2,437	34	223
Total	56	55	56	37,137	33,326	15,933

Size and Duration of Disputes

TABLE 4 gives the number of industrial disputes beginning in January 1934 classified by number of workers and by industrial groups.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN JANUARY 1934, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIAL GROUP

Industry or occupation	Number of disputes beginning in January 1934 involving—				
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 workers and over
Bakers	2	1	1		
Building trades	1		1		
Chauffeurs and teamsters	1	1	2		
Clothing		2	6	1	
Farm labor			1		
Fishermen		1	1		
Food workers		1	1		
Furniture		1	1		
Hotel and restaurant workers	2	1	1		1
Iron and steel		1			
Metal trades	2		1		
Miners			2	3	3
Motion-picture operators, actors, and theatrical workers	1				
Paper and paper-goods workers		1			
Printing and publishing	1				
Slaughtering and meat packing				1	
Street-railway workers		1			
Municipal workers				1	
Teachers		1			
Textiles		2			
Other occupations	2	1	1		
Total	12	15	19	6	4

In table 5 are shown the number of industrial disputes ending in January 1934 by industrial groups and classified duration.

TABLE 5.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN JANUARY 1934, BY INDUSTRIAL GROUP AND CLASSIFIED DURATION

Industry or occupation	Classified duration of strikes ending in January 1934				
	½ month or less	Over ½ and less than 1 month	1 month and less than 2 months	2 and less than 3 months	4 and less than 5 months
Bakers	3		1		
Building trades	2				
Chauffeurs and teamsters	2		1		
Clerks and salesmen		1	1	1	
Clothing	2				
Coopers			2		
Farm labor	1		1		
Fishermen	1	1			
Food workers	2				
Furniture	1	1			
Hotel and restaurant workers	2	1			
Iron and steel	1				
Jewelry workers				1	
Metal trades	2				
Miners	4	1			
Paper and paper-goods workers	1				
Street-railway workers	1				
Textiles	2			1	
Other occupations	3				
Total	30	5	6	3	

Table 6 gives the number of disputes beginning in January 1934 by States and classified number of workers.

TABLE 6.—TOTAL NUMBER OF STRIKES AND WORKERS INVOLVED, CLASSIFIED BY STATES AND SIZE FOR THE MONTH OF JANUARY 1934

States	Total number of strikes	Total number of workers involved	Number of disputes beginning in January 1934 involving—				
			6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 workers and over
California	4	707	1		3		
Illinois	2	670			2		
Indiana	3	383	1	1	1		
Kentucky	1	75		1			
Louisiana	1	150			1		
Massachusetts	5	650		3	2		
Michigan	2	152		1	1		
Mississippi	1	75		1			
Missouri	1	15	1				
New Jersey	2	700			2		
New York	7	1,942	2	1	3		1
North Carolina	2	265		1	1		
Ohio	4	737	1	1	1	1	
Pennsylvania	18	8,397	5	5	2	3	3
Washington	1	15	1				
West Virginia	1	500				1	
Wisconsin	1	500				1	
Total	56	15,933	12	15	19	6	4

Conciliation Work of the Department of Labor in January 1934

THE Secretary of Labor, through the Conciliation Service, exercised her good offices in connection with 65 labor disputes during January 1934. These disputes affected a known total of 29,288 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

In addition to the cases shown, there were 92 disputes involving violations of the National Industrial Recovery Act and many disputes involving civil-works projects which were handled by commissioners of conciliation, either alone or in conjunction with other agencies.

LABOR DISPUTES HANDLED BY CONCILIATION SERVICE DURING THE MONTH OF JANUARY 1934

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning—	Ending—	Directly	Indirectly
					1933	1934		
Owens-Illinois Glass Co., Charleston, W.Va.	Threatened strike.	Electrical workers	Refusal to recognize union	Adjusted. Satisfactory agreement concluded. Jurisdictional questions to be settled by international union.	Aug. 1	Jan. 17	30	745
S. Korach Co., Ashtabula, Ohio	Strike	Garment workers	Wages, union recognition, and collective bargaining.	Adjusted. Union agreement with wages fixed.	do	Jan. 15	110	
Bendix Corporation, South Bend, Ind.	Threatened strike.	Automobile workers	Alleged discrimination; union recognition asked.	Pending	Dec. 29		1,200	1,500
Carol Mining Co., Ashland, Ky	Controversy	Miners	Adjustment of wages under code.	Adjusted. Wages adjusted; company agreed to check-off and to reinstate those discharged or laid off.	Nov. 22	Jan. 4	68	97
Jersey Baking Co., Toledo, Ohio	Strike	Bakers and other workers.	Alleged discrimination and discharges.	Pending	Dec. 29		(1)	
					1934			
Warner and Bucklin Theaters, Elkhart and Goshen, Ind.	Lockout	Theater workers	Alleged discrimination for union activities.	Unable to adjust	Jan. 1	Jan. 2	11	
Lock Co., Clinton, Iowa	Threatened strike.	Employees	Discharges and refusal of company to meet employees.	do	Jan. 3	Jan. 10	150	
Garage dealers vs. students in vocational school, Pittsburgh, Pa.	Controversy	Garage workers and students.	Alleged violation of Mercantile Law No. 49; objection to students doing repair work.	Pending	Jan. 1		260	
Perry Norvell Shoe Co., Huntington, W.Va.	Threatened lockout.	Shoe workers	Company threatened to close factory if workers asked for wage increase.	Adjusted. Company withdrew its demands.	Jan. 4	Jan. 8	370	
Shell Oil Co., Alton, Ill	Threatened strike.	Engineers and other workers.	Asked check-off system, restoration of 1929 earnings, and seniority rules.	Adjusted. Company agreed to union conditions; other questions arose within oil workers' union.	Jan. 3	do	700	800
Wilson Refining Co., Chattanooga, Tenn.	do	Workers	Alleged discrimination for union affiliation.	Adjusted. Reinstated those discharged; working conditions satisfactory.	do	Jan. 16	25	100
Foster Full Fashioned Hosiery Mill, Burlington, N.C.	Lockout	Hosiery workers	Wages and working conditions.	Unclassified. Referred to National Textile Board.	Jan. 1	Jan. 15	5	60
Carolina Button Co., Mount Airy, N.C.	do	Button makers	Working conditions	Adjusted. Satisfactory agreement	Jan. 8	Jan. 13	175	500
Chatham Mills, Pittsboro, N.C.	Strike	Woven-label makers.	Discharges, discrimination, and working conditions.	Adjusted. All returned and will share work with other employees.	do	Jan. 19	90	250
Walker Bros., Stone Co., Bloomington, Ind.	Controversy	Stonecutters	Hours of labor	Pending	do		27	
Printers, Wenatchee, Wash.	Lockout	Printers	Wages and hours of labor	Pending. Regional Board also han-	Jan. 5		15	

Carolina Button Co., Mount Airy, N.C.	....do....	Button makers	Working conditions	Adjusted. Satisfactory agreement	Jan. 8	Jan. 13	175	500
Chatham Mills, Pittsboro, N.C.	Strike	Woven-label makers	Discharges, discrimination, and working conditions.	Adjusted. All returned and will share work with other employees.	...do...	Jan. 19	90	250
Walker Bros., Stone Co., Bloomington, Ind.	Controversy	Stonecutters	Hours of labor	Pending	...do...		27	
Printers, Wenatchee, Wash.	Lockout	Printers	Wages and hours of labor	Pending. Regional Board also handling.	Jan. 5		15	
Patternmakers, Indianapolis, Ind.	Threatened strike.	Patternmakers	Asked increase of wages	Pending	Jan. 3		145	
Post-office building, Lansing, Mich.	Strike	Marble setters and plasterers.	Jurisdiction of placing certain plaster imitation.	....do....	Jan. 9		(1)	
Lloyd Manufacturing Co., Menominee, Mich.	Threatened strike.	Employees	Alleged violation and discrimination.	....do....	Jan. 1		400	100
Spaulding Bakery and Scheuer Bakery, Scranton, Pa.	Strike	Bakers	Working conditions	....do....	Jan. 10		132	
Benard Erstein, Grand Rapids, Mich.	Lockout	Upholsterers	Violation of provisions of National Industrial Recovery Act.	Unable to adjust	Jan. 11	Jan. 24	21	80
Printers, Raton, N.Mex.	....do....	Printers	Wages and provisions of contract.	Pending	Jan. 10		3	
Jaunty Silk Co., Scranton, Pa.	Controversy	Silk workers	Working conditions	Adjusted. Agreed to rehire girls who were not hired after all employees had been on a strike.	Jan. 1	Jan. 12	3	300
American Stores, Wilkes-Barre, Pa.	Strike	Drivers and warehouse workers.	....do....	Pending	Jan. 14		112	
Falls Steel Tube Co., Newton Falls, Ohio.	Threatened strike.	Employees	Discharges in violation of steel code.	Adjusted. Satisfactory agreement	...do...	Jan. 25	(1)	
Low Bros., Dayton, Ohio	Strike	Painters	Working conditions	Pending	Jan. 15		(1)	
C.C.C. camp buildings, Winston-Salem, N.C.	Controversy	Workers	Wage scale for C.C.C. laborers.	Adjusted. Satisfactory agreement	...do...	Jan. 23	75	
Fisher Body Plant, Flint, Mich.	Threatened strike.	....do....	Alleged violation of code	....do....	...do...	Feb. 5	5,500	2,000
Young Radiator Co., Racine, Wis.	....do....	....do....	Working conditions	Pending. Strike was averted; negotiations continued.	Jan. 5		(1)	
Geo. W. Smith Co., Philadelphia, Pa.	Controversy	Carpenters	Wage scale for carpenters	Adjusted. Amicable relations to prevail if and when business warrants reopening of mill.	Jan. 9	Jan. 30	200	
Leather workers, Yoakum, Tex.	Threatened strike.	Leather workers	Discharges	Unclassified. Settled by regional board and those discharged reinstated.	Jan. 19	Feb. 4	3	
Garment workers, Cleveland, Ohio	....do....	Garment workers	Renewal of contract, closed shop, working conditions; wages not involved.	Adjusted. Settled by arbitration	Jan. 16	Jan. 18	1,400	
Courthouse building, Kansas City, Mo.	Strike	Drivers	Truck company refused to recognize drivers' union.	Adjusted. Work resumed; negotiations to continue.	Jan. 20	Jan. 24	150	
Tampa CWA Toy & Furniture Shop, Tampa, Fla.	Controversy	Toy makers	Wages to be paid for this work.	Adjusted. Agreed on 60 cents per hour for workers over 55 years of age; $1 per hour for younger men.	Jan. 8	Jan. 18	90	25
Quarry workers, Martinsburg, W. Va.	Threatened strike.	Quarry workers	Working conditions	Adjusted. Strike averted; continued without change.	Jan. 18		400	
Bakery workers, drivers, and confectionery workers, Pittsburgh, Pa.	Strike	Bakery workers	Discharges for union activities.	....do....	...do...		380	25

[1] Not reported.

LABOR DISPUTES HANDLED BY CONCILIATION SERVICE DURING THE MONTH OF JANUARY 1934—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning—	Ending—	Directly	Indirectly
					1934	1934		
Ohio Injector Co., Wadsworth, Ohio.	Strike	Molders	Hours, wages, and working conditions.	Adjusted. Satisfactory agreement	Jan. 15	Feb. 7	26	
Hall Baking Co., Buffalo, N.Y.	do	Drivers	Working conditions	Pending	Jan. 23		193	
Morton Salt Co., Grandsaline, Tex.	Threatened strike.	Salt workers	Company refused to negotiate with workers.	Adjusted. Allowed 5 cents per hour increase and collective bargaining.	Jan. 17	Jan. 30	201	86
Stevens Metal Products Co., Niles, Ohio.	Strike	Metal workers	Contractual relations in dispute.	Adjusted. Returned without discrimination, collective bargaining, and 6 percent increase.	Jan. 23	Feb. 1	210	
Coal haulers, Flint, Mich.	do	Coal haulers	Wage increase and working conditions.	Adjusted. Returned to work; agreed to refer differences to regional board with commissioner assisting.	Jan. 24	Jan. 26	130	80
Feder Gregg Shoe Co., Cincinnati, Ohio.	Threatened strike.	Shoe workers	Wages and working conditions.	Adjusted. Agreed on future arbitration of difficulties.	Jan. 1	Jan. 25	100	
Sewer-pipe plants, Stratton, Ohio	Controversy	Pipe workers	Wages, working conditions, and organization.	Pending	Jan. 23		20	
Harsch Bronze Co., Cleveland, Ohio.	Threatened strike.	Bronze workers	Working conditions	do	Jan. 25		280	
Hausermen Manufacturing Co., Cleveland, Ohio.	do	Employees	do	Adjusted. Continued work without change and no discrimination.	do	Jan. 31	150	
Marine engineers, firemen, boat operators, and fishermen, Massachusetts coast.	Strike	Fishing-boat workers	Wages and working conditions.	Adjusted. Accepted proposed terms	Jan. 4	Jan. 26	2,400	
Pacific Stove Works, Seattle, Wash.	Controversy	Molders	Day rates and piecework rates.	Unclassified. Regional board took up dispute for further consideration.	Jan. 1	Jan. 19	19	41
Wall-paper workers, Joliet, Ill.	Threatened strike.	Wall-paper workers	Working conditions	Pending	Jan. 27		(1)	
Street-railway workers, Long Island, N.Y.	Controversy	Street-railway workers.	Renewal of agreement and working conditions.	do	Jan. 26		(1)	
Neckwear workers, Boston, Mass.	Lockout	Neckwear workers	do	do	do		150	
Justin Shoe Co., Fort Worth, Tex.	Threatened strike.	Shoe workers	Working conditions	do	Jan. 27		(1)	
Garage dealers vs. students in vocational training school, East Pittsburgh, Pa.	Controversy	Garage workers	Alleged unfair competition	do	do		60	150
Isabella Mine, Weirton Coal Co., Republic, Pa.	Strike	Miners	Asked discharge of foreman; other grievances.	Adjusted. Satisfactory agreement	Jan. 24	Jan. 26	500	
Packing-house workers, Cleveland, Ohio.	do	Packing-house workers.	Wages and working conditions.	Adjusted. Allowed recognition and collective bargaining; increase to be allowed later.	Jan. 30	Feb. 9	700	
Wurlitzer Manufacturing Co., North Towanda, N.Y.	Threatened strike.	Employees	do	Pending	Jan. 31		800	
Windsor Dairy and Beatrice	do	Dairy workers	do	do				

Vocational training school, East Pittsburgh, Pa.									
Isabella Mine, Weirton Coal Co., Republic, Pa.	Strike	Miners	Asked discharge of foreman; other grievances.	Adjusted. Satisfactory agreement	Jan. 24	Jan. 26	500		
Packing-house workers, Cleveland, Ohio.	do	Packing-house workers.	Wages and working conditions.	Adjusted. Allowed recognition and collective barganing; increase to be allowed later.	Jan. 30	Feb. 9	700		
Worthite Manufacturing Co., North Towanda, N.Y.	Threatened strike.	Employees	do	Pending	Jan. 31		500		
Windsor Dairy and Beatrice Creamery, Denver, Colo.	do	Dairy workers	do	do	Jan. 31		(1)		
Dayton Steel Casting Co., Dayton, Ohio.	Controversy	Machinists	Asked wage increase	Adjusted. Firm could not grant increase at this time; continued without change.	Jan. 1	Jan. 23	35		
Art Dry Cleaning Co., Cincinnati, Ohio.	do	Dry cleaners	Working conditions	Adjusted. Collective bargaining; wages same as before.	Jan. 19	Jan. 24	25		
Government construction—Disputes involving prevailing wage									
Government buildings, Washington, D.C.	do	Painters	Proposed reduction from $1.37½ to $1.14⅔ per hour.	Adjusted. Continued $1.37½ per hour; reimbursements to be made.	Jan. 2	Jan. 5	200	3,000	
Fort McArthur, Los Angeles, Calif.	do	Building workers	Wage scale not posted at site of operation.	Pending	Jan. 11		120		
Coast Guard Hangar, St. Petersburg, Fla.	do	Steel workers	Ironworkers employed on steel construction.	do	Jan. 1		55		
Post-office building, Independence, Mo.	do	Building workers	Prevailing wage scale	Unclassified. Labor Board of Review to fix scales.	Jan. 23	Jan. 26	25		
Fort Miley, Calif.	Strike	Laborers	Wage scale	Pending	Jan. 30		12		
Post-office building, Washington, D.C.	Threatened strike.	Tile setters' helpers and laborers.	Use of laborers to clean tile instead of helpers.	Adjusted. Tile setters' helpers to clean tile.	Jan. 20	Jan. 29	20	150	
Bricklayers, West Point, N.Y.	Controversy	Bricklayers	Prevailing wage scales and employment of local workers.	Adjusted. No change in wages; more local men to be employed.	Jan. 18	Jan. 22	18	100	
Total							19,099	10,189	

[1] Not reported.

LABOR AWARDS AND DECISIONS

Recent Decisions of Industrial Commission of Colorado

Electrical Workers—Denver

ON NOVEMBER 13, 1933, the Industrial Commission of Colorado held a hearing on the wage dispute between the Denver Electrical Contractors' Association, Inc., and Local No. 68 of the International Brotherhood of Electrical Workers.

The contractors contended that under the agreement which their organization had entered into with the Electrical Workers' Local No. 68, on May 10, 1933, the wage scale was to remain in effect for the year ending May 10, 1934, unless a change was mutually agreed to by the parties to the agreement; and that no change should be made until the revised draft of the code of fair competition for the electrical contracting industry was approved.

The union contended that its members were entitled to an increase in wages for the reason that living costs had increased since the present wage scale was adopted; that a higher scale was established by the commission for skilled labor on all contracts to which the State of Colorado was a party in the cities of Denver, Colorado Springs, and Pueblo; and that while an agreement had been entered into on May 10, 1933, section 3 of article III of that agreement provided as follows:

> It is the intent of this agreement that the arbitration committee at their stated meeting in the months of October and April take up the question of wages and the rates of same be determined by the existing economic situation at that time. Taking into consideration statistical information furnished by the United States Department of Labor relative to what should be a fair and sufficient wage to maintain a high average standard of living.

Under this section of the agreement, the union contended, it was entitled to ask for an increased wage scale and the workers were entitled to the same scale of wages as that paid to skilled labor on public works.

On November 17, 1933, the commission made the following award:

> It is the award and decision of the commission that the Denver Electrical Contractors' Association pay the wage scale of $1.25 per hour which is now being paid to all skilled labor on public highways and other contracts to which the State of Colorado is a party; that this schedule of wages shall be based on a 30-hour week and shall not be retroactive; also, that it shall not apply on contracts that have been let before this date.

Bakery and Milk Wagon Drivers—Denver

ON December 5, 1933, the Industrial Commission of Colorado received a notice from the secretary of the Bakery and Milk Wagon

Drivers' Union, No. 219, claiming that the Beatrice Creamery Co. of Denver had discharged men because they were members of the union, and requested a hearing in the case.

At the hearing held December 18, 1933, the union made its claim, but the employer contended that no men had been discharged for that reason.

On December 20, 1933, the commission rendered the following opinion with recommendations:

The commission gave careful consideration to the evidence submitted by both sides and we are very strongly of the opinion that an employer should not discharge a man because he is a member of a labor organization. The right to belong to a labor organization and to insist upon collective bargaining is the natural right of every man. Labor organizations are as necessary as corporations. The right of labor to bargain collectively should not be denied or abridged by any employer and there should be no opposition of any kind on the part of the employer to the principle of collective bargaining. It is the only way that labor can protect its rights under the present competitive system. Freedom of contract cannot exist between a man who has nothing but his labor to sell and an employer who can do without the labor of any particular individual, and we believe it would be to the best interests of both employer and employee if every man in the employ of the Beatrice Creamery Co. would belong to a union of his choice, then when a disagreement arose it could be settled by a committee for the union and a committee for the employer. This would bring arbitration, which is the only reasonable way to settle any labor difficulty, and we wish to recommend to the employer that some arrangement of this kind be effected.

We understand that the Government at Washington is about to bring out a new code covering this industry. When the same has been agreed upon we must insist that both the employers and the employees obey its provisions. Section 7 (a) of the National Recovery Act provides: "(1) That employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection; (2) that no employee and no one seeking employment shall be required as a condition of employment to join any company union or to refrain from joining, organizing, or assisting a labor organization of his own choosing; and (3) that employers shall comply with the maximum hours of labor, minimum rates of pay, and other conditions of employment, approved or prescribed by the President."

Report of Emergency Board for Dispute on Mobile & Ohio Railroad

THE emergency board appointed by the President of the United States, on November 25, 1933, to investigate and report its findings in respect to a dispute between the Mobile & Ohio Railroad Co. and certain of its employees, made its report to the President on December 9, 1933. The board decided that the workers had sustained their contention that the wage reduction was in violation of the

Railway Labor Act, and that the men were entitled to a restoration of rates to the basis of the Chicago agreement of January 31, 1932.

History of the Case

THE controversy involved 14 organizations of railroad workers—engineers, conductors, firemen and enginemen, trainmen, telegraphers, train dispatchers, machinists, blacksmiths, boilermakers, carmen, sheet-metal workers, electrical workers, maintenance-of-way employees, and clerks.

On June 22, 1932, notice was served by the carrier upon the Brotherhood of Maintenance of Way Employees of a deduction from the basic rates of pay. The dispute was referred to the United States Board of Mediation, but mediation failed. The carrier declined arbitration and served notice of election to cancel the Chicago agreement of January 31, 1932, so far as it concerned the maintenance-of-way employees. A reduction in the basic rates was then ordered. Unskilled laborers south of the Ohio River were reduced 4 cents an hour and those north of the river 5 cents an hour; the 10 percent deduction under the Chicago agreement was also continued in effect. Thus the men north of the Ohio River received a reduction in wages amounting to 27.3 percent and those south of the river 37.5 percent. Of the 575 section men and laborers nearly 400 receive a wage of only 15 cents an hour.

On July 6, 1932, notice was served by the carrier on the engine and train service employees of a second deduction of 10 percent on the basic rates and additional to the 10 percent deduction provided in the Chicago agreement. Various conferences were held between the management and the men, without result. Mediation was asked by the employees, to which the carrier assented.

On September 12, 1932, a mediation agreement was accepted by the carrier and its employees engaged in transportation service, which were specifically named in the agreement. The agreement was as follows:

1. An additional pay-roll deduction of 10 percent in the compensation produced by schedule rates and rules shall be made effective September 16, 1932, and continue in effect until February 1, 1933.

2. Negotiations to determine rates and rules to be effective subsequent to February 1, 1933, shall be entered into prior to that date; and unless agreement is reached, the deductions provided for in this agreement and in the Chicago agreement and existing rules shall be continued in effect until negotiations shall have been concluded.

3. The question of repayment of the additional pay-roll deductions provided for herein, shall be the subject of conference between the receiver and the representatives of the employees affected and shall be conclusively determined in such conference.

4. Conferences provided for in paragraph 2 and 3 shall not be held until after January 1, 1933, and conference provided for in paragraph 3 shall not be held prior to that provided for in paragraph 2.

In pursuance of this agreement further negotiations were entered into in January 1933. These failed. Mediation was sought by the

carrier and assented to by the employees. This mediation also failed, and on November 25, 1933, the officers of the brotherhoods, except the maintenance-of-way employees, called a strike to go into effect December 1, 1933.

Findings of the Board

THE report is, in part, as follows:

The carrier naturally rests its original reduction and subsequent refusal to restore wages upon inability to pay. This may be a valid justification in case of temporary emergency, but this plea has not been recognized as a determining factor in fixing wage rates. For many years the railways in this country have maintained fairly uniform wage scales in the three great railroad districts into which the country is divided. And one of the principal objects of the National Recovery Act is to apply this principle of minimum rates of pay to other branches of industry.

The employees urge that the second 10 percent deduction, mentioned in the agreement of September 12, 1932, should not be continued, and that their pay should be based on the Chicago agreement of January 31, 1932.

One solution of the present difficulty would be to grant governmental support adequate to maintain wages uniform with other roads and enable the carrier to continue to serve efficiently that portion of the population dependent on such service.

If this cannot be done, the only other alternative appears to be the joining of this road with some other carrier. The grouping of this road into a stronger financial transportation system might well be considered by the Interstate Commerce Commission and the Federal Coordinator. In this connection we cannot overlook the fact that for all practical purposes this carrier is owned by the Southern Railway Co. and that, as the evidence taken before us demonstrates, this railway is paying to the men on its own system a higher wage than is being paid on the Mobile & Ohio Railroad. It might be inferred that the longer the present status can be maintained, the longer the Southern Railway Co. can defer the decision whether it will come to the relief of this road or relinquish it to other interests. Meanwhile the men, by reason of deferring this decision, would be compelled to remain on a salaried basis lower than is being paid to the Southern's other employees. We cannot subscribe to a doctrine which would lead to the conclusion that each branch line should be self-supporting. All are parts of an entire system. Each branch is a feeder to, and should, to any necessary extent, be fed by, other branches, so that the operation of the system as a whole may be productive of the greatest good to everyone concerned.

The board summarizes the important facts as follows:

1. An effective strike will substantially interrupt interstate commerce within the States of Illinois, Kentucky, Tennessee, Mississippi, and Alabama, to a degree such as to deprive that section of the country of essential transportation service upon the 1,150 miles of the Mobile & Ohio Railroad Co.

2. The abandonment of the road will be a serious loss to those interested in its property and will bring about a distressing condition in the country and communities tributary to it, and wholly or substantially dependent upon it for transportation service.

3. The brotherhoods are entitled to the restoration of their wages to the basis of the Chicago agreement of January 31, 1932.

4. It is for the carrier to devise the ways and means. Borrowing may be necessary. Whether aid comes from a private loan, from a subsidy, or from some governmental agency, or through a merger or grouping of the road with some other system, is not important insofar as the result is concerned. The road must work out the details.

LABOR TURN-OVER

Labor Turn-over in American Factories, 1933

ACCORDING to reports received by the Bureau of Labor Statistics from representative establishments in 148 census industry classifications, having on their pay rolls approximately 1,000,000 employees, the annual accession or hiring rate for the year 1933 was much greater than the accession rate for 1932. In contrast, the separation rate was lower in 1933 than in 1932.

The Bureau now presents quarterly figures for manufacturing as a whole and for 10 separate manufacturing industries. The form of average used for compiling these quarterly turn-over rates is the arithmetic mean.

Table 1 shows the average turn-over rates in representative American factories, by quarters, for the years 1932 and 1933. The quarterly rates show the number of changes in the quarter per 100 employees on the pay roll.

TABLE 1.—QUARTERLY AND ANNUAL TURN-OVER RATES IN REPRESENTATIVE FACTORIES IN 148 INDUSTRIES, 1932 AND 1933

Period	Separation rates						Total separation rate		Accession rate		Net turn-over rate	
	Quit		Discharge		Lay-off							
	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933
First quarter	2.28	1.56	0.58	0.38	8.18	10.14	11.04	12.08	9.65	8.50	9.65	8.50
Second quarter	2.15	2.23	.49	.52	12.92	4.46	15.56	7.21	7.80	20.86	7.80	7.21
Third quarter	2.10	4.16	.45	.78	10.78	6.31	13.33	11.25	12.55	22.88	12.55	11.25
Fourth quarter	1.77	2.18	.43	.62	8.75	11.34	10.95	14.14	10.50	11.31	10.50	11.31
Total	8.30	10.13	1.95	2.30	40.63	32.25	50.88	44.68	40.50	63.55	40.50	38.27

The annual quit, discharge, and accession rates for manufacturing as a whole for the year 1933 were all higher than for the year 1932, but the lay-off rate was considerably lower.

In addition to the quit, discharge, lay-off, and accession rates, the Bureau shows the net turn-over rate. Net turn-over means the rate of replacement. It is the number of jobs that are vacated and filled per 100 employees. In a plant that is increasing its force the net turn-over rate is the same as the separation rate, for while more people are hired than are separated from the pay rolls, the number hired above those leaving is due to expansion, and cannot be justly

charged to turn-over. On the other hand, in a plant that is decreasing the number of its employees the net turn-over rate is the same as the accession rate, for while more people are separated from the pay rolls than are hired, the excess of separations over accessions is due to a reduction in force, and therefore cannot logically be charged as a turn-over expense.

The net turn-over rate for manufacturing as a whole for the year 1933 was 38.27, or over 2 points less than the 1932 turn-over rate.

Table 2 shows the annual quit, discharge, lay-off, accession, and net turn-over rates for automobiles, boots and shoes, brick manufacturing, cotton manufacturing, foundries and machine shops, furniture, iron and steel, men's clothing, sawmills, and slaughtering and meat packing.

TABLE 2.—ANNUAL AND QUARTERLY TURN-OVER RATES IN REPRESENTATIVE PLANTS IN 10 SPECIFIED INDUSTRIES

Industry and period	Separation rates						Total separation rate		Accession rate		Net turn-over rate	
	Quit		Discharge		Lay-off							
	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933
Automobiles:												
First quarter	3.42	1.50	0.91	0.61	12.28	27.28	16.61	29.39	19.39	16.94	16.61	16.94
Second quarter	2.65	2.49	.43	.97	15.77	5.57	18.85	9.03	22.02	29.52	18.85	9.03
Third quarter	1.29	4.82	.35	1.74	40.61	12.05	42.25	18.61	7.90	28.76	7.90	18.61
Fourth quarter	1.51	3.42	.73	.90	15.88	19.90	18.12	24.22	28.04	40.02	18.12	24.22
Total	8.87	12.23	2.42	4.22	84.54	64.80	95.83	81.25	77.35	115.24	61.48	68.80
Boots and shoes:												
First quarter	3.77	2.39	.99	.56	4.52	4.09	9.28	7.04	13.93	9.54	9.28	7.04
Second quarter	2.50	2.50	.50	.54	8.81	4.19	11.90	7.23	4.41	12.15	4.41	7.23
Third quarter	3.01	5.35	.77	1.16	4.77	4.27	8.55	10.78	16.43	15.20	8.55	10.78
Fourth quarter	2.24	1.90	.45	.60	6.17	10.42	8.86	12.92	6.38	7.75	6.38	7.75
Total	11.61	12.14	2.71	2.86	24.27	22.97	38.59	37.97	41.15	44.64	28.62	32.80
Brick:												
First quarter	1.06	.67	1.49	.40	29.73	23.36	32.28	24.43	21.53	22.71	21.53	22.71
Second quarter	.84	1.13	.55	.59	32.19	13.17	33.58	14.89	24.04	46.30	24.04	14.89
Third quarter	.93	2.58	.39	.73	27.44	22.05	28.76	25.36	22.27	29.32	22.27	25.36
Fourth quarter	.64	1.74	.24	.28	39.54	39.37	40.42	41.39	18.83	20.90	18.83	20.90
Total	3.47	6.12	2.67	2.00	128.90	97.95	135.04	106.07	86.67	119.23	86.67	83.86
Cotton manufacturing:												
First quarter	3.46	3.62	.92	.65	7.69	10.50	12.07	14.77	13.48	12.58	12.07	12.58
Second quarter	2.56	6.10	.74	1.11	22.02	2.14	25.32	9.35	5.67	32.23	5.67	9.35
Third quarter	3.46	5.53	.80	1.25	5.62	9.68	9.88	16.46	31.05	21.30	9.88	16.46
Fourth quarter	3.30	3.33	.77	.86	7.20	9.81	11.27	14.00	13.55	7.76	11.27	7.76
Total	12.78	18.58	3.23	3.87	42.53	32.13	58.54	54.58	63.75	73.89	38.89	46.15
Foundries and machine shops:												
First quarter	1.24	.70	.39	.18	9.67	8.78	11.30	9.66	8.69	5.99	8.69	5.99
Second quarter	.97	1.31	.39	.47	12.32	5.70	13.68	7.48	5.79	19.08	5.79	7.48
Third quarter	.75	2.42	.25	.72	10.23	5.84	11.23	8.98	7.32	27.14	7.32	8.98
Fourth quarter	.64	1.57	.21	.53	8.43	10.24	9.28	12.34	6.40	10.15	6.40	10.15
Total	3.60	6.00	1.24	1.90	40.65	30.56	45.49	38.46	28.20	62.36	28.20	32.60
Furniture:												
First quarter	1.65	.64	.77	.40	16.40	14.71	18.82	15.75	12.32	8.41	12.32	8.41
Second quarter	1.18	3.49	.42	.33	19.38	7.74	20.98	11.56	10.86	30.71	10.86	11.56
Third quarter	1.11	2.23	.24	1.09	9.48	5.56	10.83	8.88	20.88	36.56	10.83	8.88
Fourth quarter	.60	1.68	.23	.69	11.19	25.97	12.02	28.34	9.78	9.21	9.78	9.21
Total	4.54	8.04	1.66	2.51	56.45	53.98	62.65	64.53	53.84	84.89	43.79	38.06

TABLE 2.—ANNUAL AND QUARTERLY TURN-OVER RATES IN REPRESENTATIVE PLANTS IN 10 SPECIFIED INDUSTRIES—Continued

Industry and period	Separation rates						Total separation rate		Accession rate		Net turnover rate	
	Quit		Discharge		Lay-off							
	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933
Iron and steel:												
First quarter	1.63	1.33	0.16	0.11	4.23	5.38	6.02	6.82	4.32	4.30	4.32	4.30
Second quarter	1.94	1.72	.17	.22	10.94	1.59	13.05	3.53	3.15	22.03	3.15	3.53
Third quarter	1.22	2.51	.14	.33	5.32	2.33	6.68	5.17	3.98	22.70	3.98	5.17
Fourth quarter	1.17	2.05	.14	.25	4.62	7.10	5.93	9.40	4.44	4.05	4.44	4.05
Total	5.96	7.61	.61	.91	25.11	16.40	31.68	24.92	15.89	53.08	15.89	17.05
Men's clothing:												
First quarter	2.97	1.38	.31	.15	6.41	6.44	9.69	7.97	10.29	7.38	9.69	7.38
Second quarter	3.25	2.53	.12	.40	15.28	2.94	18.65	5.87	6.54	16.26	6.54	5.87
Third quarter	3.14	3.10	.16	.58	2.73	6.85	6.03	10.53	22.54	13.26	6.03	10.53
Fourth quarter	2.14	2.26	.17	.39	7.79	10.98	10.10	13.63	8.54	7.28	8.54	7.28
Total	11.50	9.27	.76	1.52	32.21	27.21	44.47	38.00	47.91	44.18	30.80	31.06
Sawmills:												
First quarter	2.31	1.86	1.24	.80	18.04	22.74	21.59	25.40	19.70	21.99	19.70	21.99
Second quarter	2.27	3.48	.98	.75	20.70	9.26	23.95	13.49	21.22	42.47	21.22	13.49
Third quarter	3.49	3.00	.75	1.26	15.77	10.38	20.01	14.64	17.94	27.05	17.94	14.64
Fourth quarter	1.79	2.51	1.23	1.14	27.96	20.13	30.98	23.78	16.96	12.13	16.96	12.13
Total	9.86	10.85	4.20	3.95	82.47	62.51	96.53	77.31	75.82	103.64	75.82	62.25
Slaughtering and meat packing:												
First quarter	3.18	1.82	1.19	.70	19.81	15.93	24.18	18.45	16.68	16.89	16.68	16.89
Second quarter	2.77	2.64	.99	.96	17.16	8.12	20.92	11.72	20.85	23.04	20.85	11.72
Third quarter	2.57	4.21	1.11	1.11	14.77	13.96	18.45	19.28	20.24	36.99	18.45	19.28
Fourth quarter	2.12	2.68	.64	1.05	17.42	21.66	20.18	25.39	17.91	20.86	17.91	20.86
Total	10.64	11.35	3.93	3.82	69.16	59.67	83.73	74.84	75.68	97.78	73.89	68.75

In all of the 10 industries, more people were hired during 1933 than were separated from the pay rolls. In 1932, in 7 of these 10 industries more people were separated from the pay rolls than were hired. All of the industries except men's clothing had a higher quit rate in 1933 than in 1932. Seven of the 10 industries had a higher discharge rate during 1933 than during the previous year. The 1933 lay-off rate, however, was lower in all of the 10 industries than for the preceding year.

During 1933, cotton manufacturing showed the highest quit rate, 18.58; the lowest quit rate, 6, was shown by foundries and machine shops. Automobiles showed the highest discharge rate, 4.22; the lowest discharge rate, 0.91, occurred in the iron and steel industry. The highest lay-off rate, 97.95, was registered in brick manufacturing; the lowest, 16.40, in the iron and steel industry. Brick manufacturing had the highest accession rate, 119.23; the lowest accession rate, 44.18, was shown by the men's clothing industry. The highest net turnover rate, 83.86, occurred in the brick industry and the lowest, 17.05, in the iron and steel industry.

In both 1933 and 1932, 4 of the 10 industries had an annual net turn-over rate of more than 50 percent.

HOUSING

Building Operations in Principal Cities of the United States, January 1934

COMPARING building permits issued in January 1934 with those issued in December 1933, there was an increase of 13.6 percent in the number of buildings but a decrease of 19.4 percent in the estimated cost, according to reports received by the Bureau of Labor Statistics from 768 identical cities having a population of 10,000 or over.

The cost figures shown in the following tables are as estimated by the prospective builder on applying for his permit to build. No land costs are included. Only building operations within the corporate limits of the cities enumerated are shown. In States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, through their departments of labor, are cooperating with the Federal Bureau in the collection of these data.

Comparisons, December 1933 and January 1934

TABLE 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 768 identical cities of the United States having a population of 10,000 or over, by geographic divisions.

The estimated cost of the new residential buildings for which permits were issued in January decreased 39.6 percent as compared with the cost of residential buildings for which permits were issued in December. Three of the seven geographic divisions showed increases in dwelling cost and four showed decreases. Sixty percent of the total decrease occurred in the Middle Atlantic States. In the Borough of Queens in December permits were issued for apartment houses to cost over $3,000,000.

The residential buildings for the entire Middle Atlantic States, comparing 176 cities in New York, New Jersey, and Pennsylvania, totaled slightly over $1,500,000 for the month of January.

The cost of new nonresidential buildings decreased 24.1 percent, comparing January with December. Five of the seven geographic divisions showed decreases ranging from 28.3 percent in the West North Central States to 59.4 percent in the Mountain and Pacific States. The larger total for December in the last-named division was caused by the Public Utilities Building in San Francisco, Calif.,

costing over $1,000,000 and by three public buildings in Bremerton, Wash., costing over $900,000. There was an increase in indicated expenditures for additions, alterations, and repairs comparing the two divisions under discussion. Five of the seven geographic divisions registered increases. Whenever the phrase "indicated expenditures" is used in this pamphlet, it does not mean that the money was all to be expended during the month the permits were issued; in fact, a very small percentage is expended during that month. The expenditure of money occurs during a number of months after the building is started, the time varying with the size of building.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 768 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	December 1933	January 1934	Percent of change	December 1933	January 1934	Percent of change
New England	$786,200	$549,132	−30.2	$658,793	$376,069	−42.9
Middle Atlantic	4,228,850	1,547,835	−63.4	4,850,042	2,715,171	−44.0
East North Central	305,952	363,623	+18.8	2,485,898	2,824,414	+13.6
West North Central	215,700	174,250	−19.2	1,029,269	738,040	−28.3
South Atlantic	523,204	556,450	+6.4	3,265,011	2,280,757	−30.1
South Central	330,502	307,746	−6.9	1,828,683	2,998,503	+64.0
Mountain and Pacific	863,598	881,920	+2.1	3,437,681	1,394,857	−59.4
Total	7,254,006	4,380,956	−39.6	17,555,377	13,327,811	−24.1

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			
	December 1933	January 1934	Percent of change	December 1933	January 1934	Percent of change	Number of cities
New England	$993,033	$1,153,935	+16.2	$2,438,026	$2,079,136	−14.7	99
Middle Atlantic	4,192,822	3,345,363	−20.2	13,271,714	7,608,369	−42.7	176
East North Central	973,204	1,334,372	+37.1	3,765,054	4,522,409	+20.1	184
West North Central	381,141	410,315	+7.7	1,626,110	1,322,605	−18.7	74
South Atlantic	1,432,321	2,048,480	+43.0	5,220,536	4,885,687	−6.4	70
South Central	959,449	572,052	−40.4	3,118,634	3,878,301	+24.4	84
Mountain and Pacific	1,344,871	1,708,925	+27.1	5,646,150	3,985,702	−29.4	81
Total	10,276,841	10,573,442	+2.9	35,086,224	28,282,209	−19.4	768

The building-cost figures as published by the Bureau of Labor Statistics includes permits issued by local building officials, to which is added the cost of buildings for which contracts are awarded by Federal and State Governments in cities having a population of 10,000 or over. In December these additional awards totaled $4,826,871; in January, $4,898,924.

Table 2 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 768 identical cities of the United States, by geographic divisions.

TABLE 2.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 768 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	118	92	283	192	915	1,129	1,316	1,413
Middle Atlantic	193	231	526	430	2,865	2,832	3,584	3,493
East North Central	63	61	427	478	1,161	1,391	1,651	1,930
West North Central	56	49	209	169	479	473	744	691
South Atlantic	126	150	271	295	1,729	1,912	2,126	2,357
South Central	129	140	314	390	1,175	1,365	1,618	1,895
Mountain and Pacific	212	261	642	1,108	2,696	3,427	3,550	4,796
Total	897	984	2,672	3,062	11,020	12,529	14,589	16,575
Percent of change		+9.7		+14.6		+13.7		+13.6

There was an increase in the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations, comparing January 1934 with December 1933. Five of the seven geographic divisions showed increases in the total number of buildings, the largest increase appearing in the Mountain and Pacific States.

Table 3 shows the estimated cost and number of families provided for in the different kinds of housekeeping dwellings for which permits were issued in 768 identical cities for December 1933 and January 1934, by geographic divisions.

TABLE 3.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 768 IDENTICAL CITIES IN DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	$718,400	$528,202	110	88	$44,300	$20,930	14	7
Middle Atlantic	842,550	937,335	154	203	164,800	138,500	49	37
East North Central	282,702	357,623	59	60	14,250	6,000	5	2
West North Central	213,700	130,750	55	40	2,000	39,500	2	15
South Atlantic	484,954	542,950	123	148	8,250	1,000	4	2
South Central	284,802	286,416	118	132	41,000	20,630	19	12
Mountain and Pacific	708,718	728,620	195	240	54,880	105,300	21	36
Total	3,535,826	3,511,896	814	911	329,480	331,860	114	111
Percent of change		−0.7		+11.9		+0.7		−2.6

TABLE 3.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 768 IDENTICAL CITIES IN DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS—Continued

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	$23,500	0	9	0	$786,200	$549,132	133	95
Middle Atlantic	3,221,500	$472,000	1,194	160	4,228,850	1,547,835	1,397	400
East North Central	9,000	0	4	0	305,952	368,623	68	62
West North Central	0	4,000	0	4	215,700	174,250	57	59
South Atlantic	30,000	0	15	0	523,204	543,950	142	150
South Central	4,700	0	3	0	330,502	307,046	140	144
Mountain and Pacific	100,000	30,000	40	9	863,598	863,920	256	285
Total	3,388,700	506,000	1,265	173	7,254,006	4,349,756	2,193	1,196
Percent of change		−85.1		−86.3		−40.0		−45.5

Indicated expenditures for one-family dwellings increased seven tenths of 1 percent, comparing January with December. The number of families provided for in these single-family dwellings increased 11.9 percent.

The estimated cost of the two-family dwellings for which permits were issued in January were seven tenths of 1 percent higher than for December; however, the number of families provided for in this type of dwelling decreased 2.6 percent.

There was a decrease of 85.1 percent in the estimated cost of apartment houses, and a decrease of 86.3 percent in the families provided for in this type of dwelling. This decrease is wholly caused by the fact that in December permits were issued in the Borough of Queens for apartment houses to cost over $3,000,000. Apartment-house building has ebbed so low that erection of one or two large apartments the size of those built in the Borough of Queens in December makes a great change in the percentage of increase or decrease in the cost of this type of dwelling. In other words, if we exclude the cost of the apartment houses for which permits were issued in the Borough of Queens during December, the cost of apartment-house building in the remaining 767 cities totaled less than $400,000.

The cost of housekeeping dwellings as a whole decreased 40 percent, while the number of families provided for therein decreased 45.5 percent. It will be noted that the total for all kinds of housekeeping dwellings, as shown in this table for the month of December, is identical with the cost of residential buildings as shown in table 1 for that month. It is just a coincidence that these figures are identical. The estimated cost of new residential buildings as shown in table 1 includes not only the cost of housekeeping dwellings but the cost of nonhousekeeping dwellings such as hotels, lodging houses,

clubs with bedrooms, etc., whenever this type of construction is reported. It just happened that during December no permits were issued for nonhousekeeping dwellings in these 768 cities.

Table 4 shows the index numbers of families provided for, and the index numbers of indicated expenditures for new residential buildings, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations.

TABLE 4.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE INDICATED EXPENDITURES FOR BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES

[Monthly average, 1929=100]

Month	Families provided for	Indicated expenditures for—			Total building construction
		New residential buildings	New nonresidential buildings	Additions, alterations, and repairs	
December 1929	35.9	30.2	74.3	66.1	51.7
January 1930	34.2	29.4	64.3	55.1	46.1
December 1930	45.0	37.6	64.3	53.5	50.1
January 1931	39.1	30.8	43.4	55.5	38.9
December 1931	14.7	11.8	32.9	27.3	22.3
January 1932	14.4	10.2	25.0	25.8	18.2
December 1932	5.0	3.6	17.3	13.7	10.5
January 1933	4.9	3.4	26.8	16.2	14.7
December 1933	6.7	4.6	13.8	23.5	11.1
January 1934	3.7	2.8	10.5	24.2	8.9

The index numbers for new residential buildings, for new nonresidential buildings, and for total building construction were lower during January 1934 than for either January 1933 or December 1933. The index number of additions, alterations, and repairs was higher during January 1934 than during either the previous month or the corresponding month of the previous year.

Comparisons, January 1934 with January 1933

TABLE 5 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 773 identical cities of the United States having a population of 10,000 or over for the months of January 1933 and January 1934, by geographic divisions.

TABLE 5.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 773 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN JANUARY 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	January 1933	January 1934	Percent of change	January 1933	January 1934	Percent of change
New England	$767,770	$549,132	−28.5	$642,166	$376,394	−41.4
Middle Atlantic	1,720,751	1,548,335	−10.0	10,138,429	2,721,486	−73.2
East North Central	496,002	363,623	−26.7	629,742	2,824,414	+348.5
West North Central	232,840	174,250	−25.2	203,605	738,040	+262.5
South Atlantic	706,109	556,450	−21.2	1,096,380	2,280,757	+108.0
South Central	476,013	310,186	−34.8	3,197,682	2,941,487	−8.0
Mountain and Pacific	973,575	881,920	−9.4	17,329,042	1,394,857	−92.0
Total	5,373,060	4,383,896	−18.4	33,237,046	13,277,435	−60.1

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	January 1933	January 1934	Percent of change	January 1933	January 1934	Percent of change	
New England	$762,922	$1,153,935	+51.3	$2,172,858	$2,079,461	−4.3	100
Middle Atlantic	2,504,927	3,380,583	+35.0	14,364,107	7,650,404	−46.7	177
East North Central	1,124,821	1,334,372	+18.6	2,250,565	4,522,409	+100.9	186
West North Central	403,336	410,315	+1.7	839,781	1,322,605	+57.5	74
South Atlantic	820,821	2,048,480	+149.6	2,623,310	4,885,687	+86.2	70
South Central	603,336	578,348	−4.1	4,277,031	3,830,021	−10.5	85
Mountain and Pacific	908,972	1,708,925	+88.0	19,211,589	3,985,702	−79.3	81
Total	7,129,135	10,614,958	+48.9	45,739,241	28,276,289	−38.2	773

The estimated cost of new residential buildings for which permits were issued in January 1934 was 18.4 percent less than the estimated cost of the dwellings during the same month of the previous year.

The cost of new nonresidential buildings decreased 60.1 percent comparing January 1934 with January 1933. This great change was caused by decreases in the Middle Atlantic and Mountain Pacific States. In the Borough of Manhattan, during January 1933, a permit was issued for a courthouse to cost $6,000,000, while in San Francisco permits were issued for part of the work on the large bridges over San Francisco Bay to cost over $12,000,000. There was an increase of 48.9 percent in the value of additions, alterations, and repairs made to existing buildings, comparing January 1934 with the same month of 1933. Total building construction decreased 38.2 percent in estimated cost comparing the same month in the 2 recent years.

Table 6 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building construction in 773 identical cities having a population of 10,000 or over, for the months of January 1933 and January 1934, by geographic divisions.

TABLE 6.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 773 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN JANUARY 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	January 1933	January 1934	January 1933	January 1934	January 1933	January 1934	January 1933	January 1934
New England	161	92	352	194	1,176	1,129	1,689	1,415
Middle Atlantic	284	231	730	438	2,854	2,856	3,868	3,525
East North Central	113	61	522	483	1,453	1,395	2,088	1,939
West North Central	79	49	287	169	619	473	985	691
South Atlantic	211	150	475	295	1,868	1,912	2,554	2,357
South Central	252	143	401	398	1,487	1,383	2,140	1,924
Mountain and Pacific	264	261	766	1,108	2,540	3,427	3,570	4,796
Total	1,364	987	3,533	3,085	11,997	12,575	16,894	16,647
Percent of change		−27.6		−12.7		+4.8		−1.5

There was a decrease in the number of new residential buildings, in the number of new nonresidential buildings, and in the number of total building operations, comparing January 1934 with January of the previous year. The number of additions, alterations, and repairs, however, increased, comparing these 2 months.

Table 7 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the estimated cost of such dwellings, for which permits were issued in 773 identical cities during January 1933 and January 1934, by geographic divisions.

TABLE 7.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 773 IDENTICAL CITIES IN JANUARY 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	January 1933	January 1934	January 1933	January 1934	January 1933	January 1934	January 1933	January 1934
New England	$685,970	$528,202	147	88	$67,800	$20,930	21	7
Middle Atlantic	1,233,867	937,835	244	203	259,884	138,500	65	37
East North Central	458,002	357,623	111	60	1,000	6,000	1	2
West North Central	214,840	130,750	76	40	15,000	39,500	4	15
South Atlantic	686,109	542,950	205	148	10,500	1,000	6	2
South Central	410,811	288,856	236	135	38,702	20,630	23	12
Mountain and Pacific	706,525	728,620	237	240	82,686	105,300	32	36
Total	4,396,124	3,514,836	1,256	914	475,572	331,860	152	111
Percent of change		−20.0		−27.2		−30.2		−27.0

TABLE 7.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 773 IDENTICAL CITIES IN JANUARY 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS—Continued

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	January 1933	January 1934	January 1933	January 1934	January 1933	January 1934	January 1933	January 1934
New England	$14,000	0	6	0	$767,770	$549,132	174	95
Middle Atlantic	212,000	$472,000	71	160	1,705,751	1,548,335	380	400
East North Central	0	0	0	0	459,002	363,623	112	62
West North Central	3,000	4,000	4	4	232,840	174,250	84	59
South Atlantic	9,000	0	10	0	705,609	543,950	221	130
South Central	26,500	0	20	0	476,013	309,486	279	147
Mountain and Pacific	184,364	30,000	45	9	973,575	863,920	314	285
Total	448,864	506,000	156	173	5,320,060	4,352,696	1,564	1,198
Percent of change		+12.7		+10.9		−18.2		−23.4

The cost of 1-family dwellings for which permits were issued in January 1934 decreased 20 percent, as compared with the like month of 1933. The number of dwelling units provided in this type of dwelling decreased 27.2 percent.

Two-family dwellings showed a decrease of 30.2 percent as far as costs were concerned and a decrease of 27 percent in the number of dwelling units provided.

Indicated expenditures for multifamily dwellings increased 12.7 percent, while the family-dwelling units provided in these apartment houses increased 10.9 percent.

There was a decrease of 18.2 percent in the total estimated cost of housekeeping dwellings. The total number of family-dwelling units to be provided in these housekeeping dwellings decreased 23.4 percent, comparing the 2 months under discussion.

Construction From Public Funds

TABLE 8 shows the value of contracts awarded by the United States Government for construction projects of all kinds during December 1933 and January 1934. The data include awards for building construction; public roads; river, harbor, and flood-control projects; street paving; naval vessels; reclamation projects; forest service; water and sewerage systems; and miscellaneous projects.

TABLE 8.—VALUE OF CONTRACTS AWARDED FOR ALL FEDERAL CONSTRUCTION PROJECTS BY THE UNITED STATES GOVERNMENT DURING DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS [1]

Geographic division	Building construction		Public roads		River, harbor, and flood-control projects	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	$629,867	$1,639,754	$1,556,642	$2,308,761	$365,476	0
Middle Atlantic	2,704,835	982,955	5,488,775	3,005,373	800,761	$278,445
East North Central	322,223	381,032	7,592,410	3,815,187	5,112,191	1,613,249
West North Central	208,642	443,063	6,213,545	6,062,658	3,492,675	2,888,019
South Atlantic	2,499,895	3,911,244	3,994,881	5,688,687	719,660	1,965,119
South Central	2,482,416	2,494,562	8,282,160	8,854,931	2,341,272	4,088,605
Mountain and Pacific	2,188,107	1,743,593	8,798,882	6,250,895	668,134	2,430,100
Total	11,035,985	11,596,203	41,927,295	35,986,492	13,500,169	13,263,537
Outside continental United States	641,706	994,359	----------	----------	----------	2,910,000

Geographic division	Streets and roads [2]		Naval vessels		Reclamation projects		Forestry	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	$13,063	$9,767	$17,535	$178,931	0	0	$8,334	$2,125
Middle Atlantic	46,976	35,366	1,106,104	6,897,620	0	0	100,690	7,308
East North Central	160,205	2,000	962,597	42,738	0	$2,400	143,070	125,660
West North Central	35,386	63,558	0	0	0	22,700	749	3,300
South Atlantic	541,169	554,920	3,076,018	2,918,486	0	18,300	155,928	137,785
South Central	347,912	252,520	0	11,281	0	81,493	400,875	120,759
Mountain and Pacific	2,549,485	309,195	1,510,421	704,727	$1,628,150	23,317,521	6,513,534	366,417
Total	3,694,196	1,227,326	6,672,675	10,753,783	1,628,150	[3] 23,446,414	7,323,180	763,354
Outside continental United States	53,000	6,860	21,000	193,338	----------	186,534	84,000	-------

Geographic division	Water and sewerage systems		Miscellaneous		Total	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	$14,495	$7,000	$62,695	$784,066	$2,668,107	$4,930,404
Middle Atlantic	5,000	25,489	304,221	3,159,318	10,557,362	14,391,874
East North Central	16,722	59,216	478,657	1,027,541	14,788,075	7,069,023
West North Central	0	0	34,728	62,570	9,985,725	9,545,868
South Atlantic	310,738	84,804	439,249	795,530	11,737,538	16,074,875
South Central	32,543	12,729	112,564	322,594	13,999,742	16,239,474
Mountain and Pacific	52,879	4,813	950,376	682,007	24,859,968	35,809,268
Total	432,377	194,051	2,382,490	6,833,626	88,596,517	[3] 104,064,786
Outside continental United States	22,300	1,000	181,022	376,189	1,003,028	4,668,280

[1] Subject to revision.
[2] Other than those reported by the Bureau of Public Roads.
[3] Includes $4,000 not allocated by geographic divisions.

The value of contracts awarded by the Federal Government during January 1934 for construction projects of all kinds inside of continental United States totaled $104,064,786, an increase of over $15,000,000 as compared with December 1933.

Increases were shown in the value of contracts awarded for building construction, for naval vessels, for reclamation projects, and for miscellaneous projects. Decreases were shown in the value of awards

for public-road building, for river, harbor, and flood-control projects, for forestry projects, and for water and sewage systems.

There was an increase in the value of projects for which contracts were awarded in the New England States, the Middle Atlantic States, the South Atlantic States, the South Central States, and the Mountain and Pacific States. Decreases occurred in the East North Central States and the West North Central States. Road building accounted for a larger percentage of the value of awards than any other type of construction project in 6 of the 7 geographic divisions. In the Mountain and Pacific States, however, reclamation projects showed a higher value than road building.

In the outlying territories of the United States contracts were awarded during January to cost over $4,500,000. December awards in our outlying possessions totaled slightly more than $1,000,000.

Table 9 shows the value of contracts awarded from public-works funds for all non-Federal projects, by geographic divisions.

TABLE 9.—VALUE OF CONTRACTS AWARDED FOR ALL NONFEDERAL CONSTRUCTION PROJECTS BY THE UNITED STATES GOVERNMENT DURING DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	Building construction		Streets and roads [1]		Water and sewage systems	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	0	$515,638	$320,236	$1,018,976	$1,642,284	$1,232,373
Middle Atlantic	$2,327,815	939,971	0	94,059	0	1,034,534
East North Central	6,343,251	2,155,937	196,816	51,959	2,320,547	453,806
West North Central	1,717,484	1,067,786	157,905	619,637	353,804	1,041,500
South Atlantic	561,975	1,138,256	0	0	534,253	699,647
South Central	106,720	629,499	66,822	6,123	192,419	185,761
Mountain and Pacific	106,127	1,301,613	0	3,682	315,861	366,972
Total	11,163,372	7,748,700	741,779	1,794,436	5,359,168	5,014,593
Outside continental United States						129,239

Geographic division	Railroad construction and repairs		Miscellaneous		Total	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England			0	$79,000	$1,962,520	$2,845,987
Middle Atlantic		[2] $17,998,394	0	0	2,327,815	20,066,958
East North Central			$47,907	0	8,908,521	2,661,702
West North Central			24,318	0	2,253,511	2,728,923
South Atlantic			0	0	1,096,228	1,837,903
South Central			399,400	0	765,361	821,383
Mountain and Pacific			54,508	87,211	476,496	1,759,478
Total		[3] 62,998,394	526,133	166,211	17,790,452	[3] 77,722,334
Outside continental United States						129,239

[1] Other than those reported by the Bureau of Public Roads.
[2] Includes $998,394 for subway construction.
[3] Includes $45,000,000 not allocated by geographic divisions.

Non-Federal projects are contracts awarded by States, cities, counties, or, in some cases, private firms, financed from funds pro-

vided by the Public Works Administration. These funds may be either by loan and grant or by grant only.

During January 1934, contracts awarded by force account and started on non-Federal public-works projects totaled nearly $78,000,000, as compared with slightly less than $18,000,000 during December 1933. The increase was caused by the force-account work started by railroad companies from funds loaned by the Public Works Administration. No contract or force-account work of this type was started during December.

Building construction awards from non-Federal funds showed a decrease of over $3,000,000, comparing the 2 months. Decreases occurred in the value of awards made for water and sewerage systems and for miscellaneous projects. Street and road paving as shown in table 9 does not include the road work done by the Bureau of Public Roads of the United States Department of Agriculture.

Table 10 shows the value of public buildings and highway construction awards as reported by the various State governments.

TABLE 10.—VALUE OF PUBLIC BUILDING AND HIGHWAY CONSTRUCTION AWARDS AS REPORTED BY THE STATE GOVERNMENTS, BY GEOGRAPHIC DIVISIONS

Geographic division	Value of awards for public buildings			Value of awards for highway construction	
	January 1933	December 1933	January 1934	December 1933	January 1934
New England	0	$99,985	$134,856	0	0
Middle Atlantic	$5,195,217	319,769	1,850,605	0	$217,176
East North Central	50,512	1,780,777	1,355,193	$62,851	20,334
West North Central	26,057	437,482	85,465	228,883	276,102
South Atlantic	429,378	362,654	143,616	252,285	117,204
South Central	334,084	135,157	414,723	311,202	19,756
Mountain and Pacific	127,095	550,971	174,876	2,843,972	1,161,108
Total	6,162,343	3,686,795	4,159,334	3,699,193	1,811,680

Data concerning building construction awards by State governments were received direct from the State officials. Information concerning highway construction was obtained from the Bureau of Public Roads of the United States Department of Agriculture. Neither building nor highway construction awards include projects which are financed from public-works funds.

During January 1934, State awards for building construction totaled slightly more than $4,000,000. This was an increase of over $400,000 as compared with December 1933, but a decrease of over $2,000,000 as compared with January 1933.

The value of awards for highway construction decreased approximately 50 percent comparing January 1934 with December 1933.

Construction Details, By Cities

TABLE 11 shows the estimated expenditures for new residential buildings, for new nonresidential buildings, and for total building construction, together with the number of families provided for in new dwellings, in each of the cities in the United States having a population of 10,000 or over from which reports were received for January 1934.

Permits were issued during January for the following important building projects: In Chicago, Ill., for a pumping station to cost nearly $800,000; in Muncie, Ind., for a teachers' college to cost over $300,000; in Terre Haute, Ind., for a college building to cost $400,000; in Oklahoma City, Okla., for a brewery to cost $250,000. Contracts were awarded by the Federal Government for a hospital building in Washington, D.C., to cost over $455,000; for an Army barracks in Montgomery, Ala., to cost over $300,000; and for an Army barracks in Shreveport, La., to cost $425,000.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934

New England States

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Connecticut:				
Ansonia	0	0	$125	$400
Bridgeport	$18,730	3	6,750	44,605
Bristol	0	0	300	2,207
Danbury	0	0	0	0
Derby	0	0	0	345
Enfield [1]	0	0	325	325
Fairfield	9,600	3	2,450	26,900
Greenwich	28,000	2	2,500	76,350
Hamden	2,000	1	625	2,625
Hartford	8,000	2	600	47,193
Meriden	11,350	3	200	20,140
Middletown	0	0	295	4,945
Milford	2,500	1	4,275	11,275
New Britain	0	0	58,700	67,894
New Haven	0	0	5,245	10,645
Norwalk	0	0	175	6,700
Norwich	0	0	2,022	4,080
Stamford	0	0	2,500	10,235
Stratford	15,552	4	55	16,532
Torrington	4,000	1	75	4,435
Wallingford	0	0	0	1,600
Waterbury	0	0	0	14,125
West Hartford	54,000	8	700	64,788
Willimantic	0	0	225	6,850
Maine:				
Auburn	0	0	0	500
Lewiston	1,200	1	4,000	5,200
Portland	0	0	0	69,539
South Portland	0	0	125	3,625
Westbrook	0	0	0	800
Massachusetts:				
Arlington	20,000	2	0	20,538
Belmont	20,000	3	45,300	70,935
Beverly	3,000	1	0	13,500
Boston [2]	72,000	15	14,850	363,125
Braintree	3,500	1	0	3,750
Brockton	0	0	0	$8,350
Brookline	$20,000	2	$2,500	36,030
Cambridge	0	0	0	17,250
Chelsea	0	0	15,222	20,272
Chicopee	0	0	200	13,968
Dedham	6,550	1	0	11,750
Easthampton	0	0	300	300
Everett	0	0	0	4,290
Fitchburg	0	0	42,300	52,100
Framingham	0	0	1,000	1,700
Gardner	0	0	90	790
Lawrence	0	0	0	27,775
Leominster	0	0	0	2,150
Lowell	2,500	1	0	6,250
Lynn	0	0	425	25,945
Malden	0	0	790	5,885
Marlborough	2,500	1	200	2,700
Medford	4,000	1	10,000	15,400
Melrose	5,000	1	4,200	11,385
Methuen	3,000	1	1,000	7,500
Milton	15,500	3	27,175	45,950
Needham	10,500	2	500	11,450
New Bedford	0	0	20,725	27,725
Newburyport	0	0	0	5,300
Newton	62,000	6	1,300	75,880
North Adams	0	0	0	3,170
Northampton	2,000	1	150	4,100
North Attleboro	4,350	1	0	4,800
Norwood	0	0	650	3,117
Peabody	3,800	1	3,000	17,253
Pittsfield	0	0	0	35,300
Quincy	1,800	1	275	4,274
Revere	3,500	1	75	11,075
Salem	0	0	0	72,550
Saugus	0	0	0	0
Somerville	0	0	0	5,335

[1] Not included in totals.

[2] Applications filed.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

New England States—Continued

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Massachusetts—Continued.				
Southbridge	0	0	0	0
Springfield	0	0	$1,700	$88,479
Stoneham	$4,500	1	0	4,500
Swampscott	0	0	725	725
Taunton	0	0	580	2,180
Waltham	6,500	1	9,100	18,300
Watertown	0	0	0	11,250
Wellesley	64,500	5	4,000	78,500
Westfield	0	0	0	1,400
West Springfield	0	0	50	175
Winchester	0	0	0	3,100
Winthrop	0	0	0	0
Woburn	0	0	200	200
Worcester	27,300	5	1,250	49,760
New Hampshire:				
Berlin	0	0	0	1,041
Keene	3,800	1	200	5,400
Manchester	0	0	35	7,485
Portsmouth [1]	0	0	0	100
Rhode Island:				
Central Falls	0	0	$2,050	$4,990
Cranston	$2,800	1	700	3,850
East Providence	13,000	3	1,360	15,515
Newport	0	0	0	800
North Providence	0	0	0	0
Pawtucket	0	0	1,850	27,350
Providence	0	0	27,150	61,400
Warwick	0	0	0	10,200
Westerly	5,500	2	40,550	48,225
West Warwick	0	0	300	300
Woonsocket	800	1	100	3,561
Vermont:				
Bennington	0	0	0	0
Rutland	0	0	0	35,000
Total	549,132	95	376,069	2,079,136

Middle Atlantic States

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
New Jersey:				
Asbury Park	$2,900	1	$300	$5,425
Atlantic City	0	0	250	11,869
Bayonne	0	0	0	7,673
Belleville	11,000	4	200	22,565
Bloomfield	5,000	1	800	6,400
Bridgeton	900	1	0	2,500
Burlington	0	0	560	1,685
Camden	0	0	73,085	80,030
Clifton	0	0	12,025	13,310
Dover	0	0	250	650
East Orange	0	0	670	9,622
Elizabeth	5,000	1	19,400	27,190
Englewood	0	0	16,000	17,150
Garfield	0	0	0	2,050
Hackensack	0	0	0	5,510
Harrison	0	0	1,000	5,390
Hillside Township	0	0	0	440
Hoboken	0	0	0	2,772
Irvington	0	0	0	480
Jersey City	3,500	1	500	34,380
Kearny	0	0	7,600	8,200
Linden	4,000	2	500	4,500
Long Branch	0	0	628	13,178
Lyndhurst Township	0	0	200	960
Maplewood Township	19,000	2	800	25,850
Montclair	0	0	0	6,600
Morristown	0	0	0	200
Neptune Township	0	0	0	0
Newark	0	0	18,000	57,565
New Brunswick	0	0	350	12,190
Nutley	0	0	600	1,025
Orange	0	0	300	1,342
Passaic	0	0	0	16,300
Paterson	0	0	8,545	20,590
Perth Amboy	0	0	0	1,400
Phillipsburg	0	0	300	750
Plainfield	16,500	2	650	45,890
Pleasantville	0	0	2,000	3,000
Red Bank	2,000	1	0	2,350
New Jersey—Con.				
Ridgefield Park	0	0	$200	$200
Ridgewood	0	0	150	1,690
Roselle	$2,750	1	11,200	14,365
Rutherford	0	0	1,475	5,820
South Orange	8,000	1	0	12,500
South River [1]	2,500	1	2,790	5,890
Teaneck Township	61,400	9	325	64,750
Trenton	6,500	2	870	8,280
Union City	0	0	0	11,139
Union Township	0	0	4,500	5,800
Weehawken Township	0	0	0	360
Westfield	8,000	1	0	10,760
West New York	0	0	0	3,585
West Orange	1,850	1	600	3,630
New York:				
Albany	19,000	3	31,900	81,595
Amsterdam	0	0	300	300
Auburn	0	0	0	1,510
Batavia	6,000	1	100	6,100
Binghamton	0	0	28,822	45,203
Buffalo	110,000	1	64,775	222,770
Cohoes	0	0	0	0
Corning	0	0	0	875
Dunkirk	0	0	0	0
Elmira	0	0	700	2,453
Endicott	2,600	1	9,500	12,550
Freeport	0	0	7,000	15,000
Fulton	0	0	500	1,700
Glen Cove	0	0	150	850
Glens Falls	0	0	50	6,943
Hempstead	12,785	2	26,644	41,629
Herkimer	0	0	0	0
Hornell	0	0	0	0
Irondequoit	6,000	1	3,070	9,070
Ithaca	0	0	0	1,900
Jamestown	0	0	0	5,025
Johnson City	0	0	450	850
Kenmore	0	0	0	0
Kingston	0	0	750	66,135
Lackawanna	0	0	0	0
Lockport	5,750	1	0	5,750

[1] Not included in totals.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

Middle Atlantic States—Continued

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
New York—Con.				
Lynbrook	0	0	$1,250	$1,550
Mamaroneck	$4,500	1	0	15,280
Massena	0	0	0	1,000
Middletown	11,800	3	1,903	14,463
Mount Vernon	9,000	1	2,050	23,700
Newburgh	5,000	1	0	5,550
New Rochelle	22,000	2	300	31,775
New York City:				
The Bronx [2]	52,350	16	235,700	481,336
Brooklyn [2]	519,300	165	264,030	1,415,480
Manhattan [2]	0	0	607,500	1,662,083
Queens [2]	419,050	127	344,550	939,949
Richmond [2]	3,900	1	202,005	219,533
Niagara Falls	0	0	11,675	14,671
North Tonawanda	0	0	0	0
Ogdensburg	0	0	0	1,138
Olean	0	0	0	0
Oneonta	5,500	1	4,300	10,600
Ossining	0	0	7,500	23,500
Oswego	0	0	0	0
Peekskill	0	0	0	6,675
Plattsburg	7,000	1	30,000	37,000
Port Chester [1]	0	0	0	1,600
Port Jervis	0	0	0	0
Rensselaer	4,400	2	11,000	15,790
Rockville Center	35,900	7	7,155	44,395
Saratoga Springs	0	0	0	77,000
Schenectady	3,500	1	18,000	39,750
Syracuse	0	0	7,800	33,300
Tonawanda	0	0	150	150
Troy	3,500	1	455	8,605
Utica	11,000	3	0	12,550
Valley Stream	0	0	6,400	7,050
Watertown	8,500	1	500	9,800
White Plains	0	0	30,400	36,100
Yonkers	18,600	5	2,700	26,650
Pennsylvania:				
Abington Township	0	0	200	2,910
Allentown	0	0	0	31,930
Altoona	0	0	15	18,816
Ambridge	0	0	0	0
Arnold	0	0	0	0
Berwick [1]	0	0	3,000	3,640
Bethlehem	2,500	1	150	2,650
Braddock	0	0	0	0
Bradford	0	0	1,200	5,435
Bristol	0	0	0	500
Canonsburg	6,500	1	0	6,500
Carlisle	0	0	0	75
Chambersburg	0	0	0	0
Charleroi	0	0	0	0
Chester	0	0	0	1,000
Clairton	0	0	0	690
Coatesville	0	0	0	1,486
Connellsville	0	0	0	0
Conshohocken	0	0	$1,000	$1,330
Coraopolis	0	0	0	0
Donora	0	0	0	0
Du Bois	0	0	0	0
Duquesne	0	0	0	1,100
Easton	0	0	400	6,720
Erie	0	0	650	2,350
Greensburg	0	0	56,790	56,790
Harrisburg	0	0	56,376	64,276
Haverford	$10,000	1	0	14,805
Hazleton	0	0	0	64,778
Jeannette	0	0	0	0
Johnstown	0	0	6,500	7,096
Kingston	0	0	100	100
Lancaster	0	0	14,000	21,107
Latrobe	0	0	2,900	2,900
Lower Merion Township	0	0	3,900	13,865
McKeesport	0	0	0	4,439
McKees Rocks	0	0	0	0
Mahonoy City	0	0	0	0
Meadville	0	0	0	8,270
Monessen	0	0	450	3,850
Mount Lebanon Township	19,800	2	0	20,374
Munhall	0	0	0	0
Nanticoke	1,300	1	0	1,300
New Castle	0	0	6,360	6,435
New Kensington	0	0	0	0
Norristown	0	0	30	7,474
North Braddock	0	0	0	0
Oil City	0	0	0	7,825
Philadelphia	0	0	215,044	454,581
Phoenixville	0	0	0	0
Pittsburgh	8,000	2	130,340	230,240
Pittston	0	0	0	0
Plymouth	0	0	0	0
Pottstown	0	0	3,050	10,250
Pottsville	3,000	1	0	4,500
Reading [1]	0	0	2,000	40,675
Scranton	5,000	2	35,533	42,233
Sharon	0	0	0	0
Steelton	0	0	0	0
Sunbury	0	0	0	0
Uniontown	0	0	4,133	5,133
Upper Darby	25,000	8	3,900	31,820
Vandergrift	0	0	0	16,000
Warren	0	0	1,500	3,100
Washington	0	0	1,400	1,400
West Chester	0	0	10,400	10,475
Wilkes-Barre	0	0	0	9,925
Wilkinsburg	0	0	0	620
Williamsport	1,500	1	85	15,073
York	0	0	1,898	17,332
Total	1,547,835	400	2,715,171	7,608,369

[1] Not included in totals.

[2] Applications filed.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

East North Central States

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Illinois:				
Alton	$4,000	1	$5,250	$11,115
Aurora	0	0	0	1,615
Belleville	0	0	0	0
Berwyn	0	0	0	2,400
Bloomington	0	0	0	0
Blue Island	0	0	0	970
Brookfield	0	0	7,675	7,818
Cairo	0	0	150	150
Calumet City	500	1	0	500
Canton	0	0	300	300
Centralia	0	0	0	0
Champaign	0	0	0	2,500
Chicago	13,000	5	832,390	970,435
Chicago Heights	0	0	0	0
Cicero	0	0	3,600	4,700
Danville	0	0	510	1,960
Decatur	0	0	920	22,920
East St. Louis	0	0	120	15,355
Elgin	0	0	0	22,150
Elmhurst	0	0	0	0
Elmwood Park	0	0	0	200
Evanston	20,000	1	42,750	78,250
Forest Park	0	0	100	800
Freeport	4,000	1	1,700	5,700
Granite City	0	0	300	300
Harvey	3,500	1	0	3,500
Highland Park	9,800	1	14,870	24,770
Joliet	0	0	0	5,200
Kankakee	0	0	0	500
La Grange	0	0	2,000	3,000
Maywood	0	0	0	150
Melrose Park	0	0	0	0
Moline	0	0	0	733
Mount Vernon	0	0	0	0
Oak Park	0	0	0	150
Ottawa	0	0	0	0
Park Ridge	0	0	0	0
Peoria	0	0	1,200	5,825
Quincy	0	0	4,450	13,050
Rockford	0	0	160	17,405
Rock Island	0	0	75	15,808
Springfield	0	0	100	62,614
Sterling	0	0	0	875
Streator	0	0	0	50
Urbana	0	0	0	0
Waukegan	0	0	0	6,397
Wilmette	0	0	0	0
Winnetka	0	0	0	4,150
Indiana:				
Bedford	0	0	0	912
Connersville	0	0	0	500
Crawfordsville	0	0	0	0
East Chicago	0	0	0	160
Elkhart	0	0	550	1,250
Elwood	0	0	2,000	2,225
Evansville	0	0	600	13,306
Fort Wayne	0	0	22,822	29,813
Frankfort	0	0	0	0
Gary	900	1	2,550	9,050
Goshen	0	0	0	0
Hammond	500	1	3,350	88,774
Huntington	0	0	0	0
Indianapolis	26,500	4	21,045	81,985
Jeffersonville	0	0	0	0
Kokomo	0	0	200	5,225
Lafayette	0	0	0	0
La Porte	0	0	0	0
Logansport	0	0	100	1,100
Marion	0	0	0	3,925
Michigan City	0	0	9,000	9,000
Mishawaka	0	0	50	1,075
Indiana—Contd.				
Muncie	0	0	$397,287	$404,942
New Castle	0	0	0	0
Peru	0	0	0	0
Richmond	0	0	0	2,300
Shelbyville	0	0	1,500	1,500
South Bend	0	0	350	5,660
Terre Haute	0	0	400,595	405,590
Vincennes	0	0	0	1,060
Whiting	0	0	0	200
Michigan:				
Adrian	0	0	100	100
Ann Arbor	0	0	140	3,865
Battle Creek	$800	1	32,900	34,900
Bay City	0	0	125	1,925
Detroit	75,900	12	209,167	665,498
Escanaba	0	0	0	0
Ferndale	0	0	0	900
Flint	0	0	10,609	16,739
Grand Rapids	4,000	1	4,025	24,675
Grosse Pointe Park	0	0	0	1,700
Hamtramck	0	0	0	19,540
Highland Park	0	0	0	9,665
Holland	0	0	54,221	57,611
Ironwood	0	0	0	0
Jackson	0	0	1,480	5,041
Kalamazoo	0	0	50	3,210
Lansing	0	0	18,700	23,175
Lincoln Park	0	0	335	1,685
Marquette	0	0	0	0
Menominee	0	0	0	0
Monroe	0	0	0	40
Mount Clemens	0	0	199,850	199,850
Muskegon	500	1	1,100	3,800
Owosso	0	0	0	0
Pontiac	0	0	4,500	6,315
Port Huron	0	0	0	550
River Rouge	0	0	7,050	16,850
Royal Oak	0	0	0	1,500
Saginaw	0	0	58,115	66,465
Sault Ste. Marie	0	0	0	0
Traverse City	0	0	0	0
Wyandotte	0	0	1,735	7,279
Ypsilanti	0	0	115	115
Ohio:				
Akron	1,500	1	1,780	29,160
Alliance	0	0	2,000	2,000
Ashland	0	0	4,550	4,550
Bellaire	0	0	0	0
Bucyrus	0	0	0	0
Cambridge	0	0	0	0
Campbell	0	0	0	0
Canton	0	0	695	5,020
Cincinnati	56,500	8	66,540	168,095
Cleveland	9,441	2	5,550	71,941
Cleveland Heights	0	0	5,300	8,480
Columbus	0	0	6,000	34,128
Cuyahoga Falls	0	0	0	0
Dayton	0	0	8,024	26,713
East Cleveland	0	0	300	600
Elyria	0	0	350	3,025
Euclid	28,182	6	0	28,182
Findlay	0	0	6,275	6,875
Fostoria	0	0	0	0
Fremont	0	0	200	200
Garfield Heights	0	0	250	250
Hamilton	0	0	100	300
Ironton	0	0	113	213
Lakewood	4,500	1	300	5,170
Lima	0	0	300	950

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

East North Central States—Continued

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Ohio—Continued.				
Lorain	0	0	0	0
Mansfield	0	0	$300	$657
Marietta	0	0	0	4,320
Marion	0	0	0	200
Martins Ferry	0	0	0	120
Massillon	0	0	440	615
Middletown	0	0	530	3,735
Newark	0	0	450	4,600
Norwood	0	0	15,943	15,943
Parma	0	0	0	0
Piqua	0	0	0	0
Portsmouth	0	0	275	600
Salem	0	0	0	0
Sandusky	0	0	555	555
Shaker Heights	$57,000	3	16,000	73,000
Springfield	0	0	28,700	29,575
Steubenville	11,600	4	0	11,600
Struthers	0	0	8,000	8,000
Tiffin	4,500	1	0	4,500
Toledo	0	0	152,185	156,500
Warren	0	0	10	2,100
Wooster	0	0	0	0
Xenia	0	0	6,000	12,000
Youngstown	0	0	285	5,160
Zanesville	2,000	1	575	3,575
Wisconsin:				
Ashland	0	0	0	0
Beloit	0	0	0	$473
Cudahy	0	0	0	0
Eau Claire	0	0	0	0
Fond du Lac	$4,000	1	$800	4,975
Green Bay	0	0	10,600	11,670
Janesville	5,000	1	200	5,750
Kenosha	0	0	22,469	23,944
Madison	0	0	0	15,799
Manitowoc	0	0	0	2,097
Marinette	0	0	355	355
Milwaukee	0	0	4,829	64,782
Oshkosh	0	0	600	725
Racine	0	0	0	4,960
Sheboygan	0	0	0	10,548
Shorewood	15,500	1	0	15,500
South Milwaukee	0	0	0	0
Stevens Point	0	0	0	240
Superior	0	0	0	250
Two Rivers	0	0	49,050	57,047
Waukesha	0	0	4,100	4,100
Wausau	0	0	0	1,250
Wauwatosa	0	0	7,500	7,500
West Allis	0	0	100	375
Total	363,623	62	2,824,414	4,522,406

West North Central States

Iowa:				
Ames	0	0	0	$55
Boone	0	0	0	250
Burlington	0	0	$200	1,200
Cedar Rapids	$9,000	2	0	30,922
Council Bluffs	0	0	0	17,062
Davenport	0	0	2,560	8,112
Des Moines	1,150	2	3,750	8,715
Dubuque	5,000	3	0	11,143
Fort Dodge	0	0	0	725
Iowa City	0	0	18,523	20,223
Keokuk	5,000	1	0	5,400
Marshalltown	0	0	0	550
Mason City	0	0	1,580	1,970
Muscatine	0	0	50	550
Ottumwa	1,500	1	0	24,500
Sioux City	1,500	1	1,000	13,800
Waterloo	0	0	100	1,590
Kansas:				
Arkansas City	0	0	0	0
Atchison	0	0	430	430
Coffeyville	0	0	215	475
Dodge City	0	0	0	0
Eldorado	700	1	0	750
Emporia	4,500	1	0	4,500
Fort Scott	0	0	0	0
Hutchinson	0	0	425	1,275
Independence	0	0	0	0
Kansas City	11,050	3	10,100	21,725
Lawrence	0	0	800	2,675
Manhattan	0	0	0	0
Newton	0	0	10	670
Pittsburg	0	0	0	0
Salina	0	0	2,000	2,000
Topeka	12,500	3	1,215	18,120
Wichita	0	0	15,310	26,245
Minnesota:				
Albert Lea	0	0	3,300	3,700
Duluth	5,000	1	100	29,096
Faribault	0	0	245	19,015
Hibbing	0	0	0	0
Mankato	0	0	0	2,900
Minnesota—Con.				
Minneapolis	$20,250	6	$371,613	$439,788
Rochester	0	0	0	7,600
St. Cloud	0	0	0	0
St. Paul	7,200	1	123,240	151,008
South St. Paul	0	0	4,200	5,650
Winona	0	0	95,380	95,380
Missouri:				
Cape Girardeau	0	0	1,267	1,267
Columbia	0	0	0	0
Hannibal	0	0	500	900
Independence	0	0	0	0
Jefferson City	0	0	340	4,165
Joplin	0	0	300	2,200
Kansas City	17,500	5	1,000	30,500
Maplewood	0	0	3,000	3,000
Moberly	7,500	1	0	19,500
St. Charles	0	0	300	300
St. Joseph	0	0	240	38,690
St. Louis	43,500	15	52,775	157,155
Springfield	0	0	3,650	5,750
Nebraska:				
Beatrice	0	0	125	125
Fremont	0	0	550	1,100
Grand Island	0	0	0	6,685
Hastings	0	0	1,500	1,500
Lincoln	11,000	6	1,780	28,492
North Platte	0	0	0	0
Omaha	5,800	2	13,575	29,725
North Dakota:				
Bismarck	1,400	1	0	1,400
Fargo	0	0	0	1,350
Grand Forks	0	0	0	0
Minot	0	0	0	2,700
South Dakota:				
Aberdeen	0	0	250	250
Huron	0	0	0	0
Mitchell	0	0	0	0
Rapid City	1,200	2	392	3,932
Sioux Falls	2,000	1	150	2,150
Total	174,250	59	738,040	1,322,605

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

South Atlantic States

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Delaware:				
Wilmington	$37,500	6	$200,366	$248,581
District of Columbia:				
Washington	234,050	30	1,459,616	1,967,520
Florida:				
Gainesville	20,700	5	2,000	29,060
Jacksonville	16,150	7	4,435	267,841
Key West	0	0	0	15,418
Miami	36,050	12	21,055	124,151
Orlando	0	0	550	15,436
Pensacola	1,500	1	102,260	118,427
St. Augustine	0	0	0	1,175
St. Petersburg	5,900	3	4,500	24,600
Sanford	0	0	0	166
Tallahassee	6,575	3	75	17,101
Tampa	3,500	1	2,330	21,903
West Palm Beach	7,700	5	79,049	91,599
Georgia:				
Athens	5,000	1	0	6,989
Atlanta	6,000	3	21,540	597,287
Augusta	3,000	1	101,885	107,675
Brunswick	0	0	0	4,335
Columbus	620	1	19,690	40,275
Lagrange	0	0	300	300
Rome	6,500	3	14,100	20,600
Savannah	0	0	675	80,140
Maryland:				
Annapolis	0	0	0	5,358
Baltimore	9,000	2	141,350	490,420
Cumberland	8,500	2	700	9,200
Frederick	0	0	2,250	6,050
Hagerstown	6,500	1	560	8,760
Salisbury	0	0	10,000	10,200
North Carolina:				
Asheville	0	0	1,040	4,635
Charlotte	16,000	2	4,550	28,205
Concord	1,500	2	0	1,950
Durham	40,290	15	0	62,800
Fayetteville	0	0	0	2,144
Goldsboro	0	0	19,000	29,000
Greensboro	3,350	3	350	10,660
North Carolina—Continued.				
High Point	0	0	0	$1,325
New Bern	0	0	0	660
Statesville	0	0	0	1,000
Thomasville	$1,800	1	$10	1,810
Wilmington	1,400	2	4,300	31,108
Winston-Salem	1,975	3	465	20,374
South Carolina:				
Anderson	5,600	1	0	5,950
Charleston	5,550	3	350	6,600
Columbia	0	0	7,080	11,980
Florence	9,300	3	7,000	18,600
Greenville	0	0	3,150	8,100
Greenwood	0	0	30	2,285
Rock Hill	500	1	200	2,900
Spartanburg	0	0	0	1,382
Virginia:				
Alexandria	9,500	2	890	21,685
Danville	3,900	7	2,000	6,025
Hopewell	0	0	0	720
Lynchburg	9,890	5	6,050	18,776
Newport News	0	0	6,943	9,995
Norfolk	2,500	2	5,690	54,438
Petersburg	1,400	2	25	2,925
Portsmouth	1,800	1	1,940	6,551
Richmond	11,800	3	4,295	74,830
Roanoke	0	0	2,188	23,495
Suffolk	0	0	730	1,680
Winchester	0	0	0	0
West Virginia:				
Bluefield	0	0	375	725
Charleston	7,000	1	2,050	14,202
Clarksburg	0	0	4,520	5,870
Fairmont	0	0	1,500	3,265
Huntington	1,650	2	250	6,100
Martinsburg	2,000	1	0	4,450
Morgantown	0	0	3,750	6,590
Parkersburg	3,000	1	750	34,500
Wheeling	0	0	0	5,830
Total	556,450	150	2,280,757	4,885,687

South Central States

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Alabama:				
Anniston	0	0	0	$11,620
Bessemer	0	0	0	1,175
Birmingham	0	0	$3,250	27,055
Decatur	0	0	0	175
Dothan	0	0	20	1,620
Gadsden	0	0	800	2,285
Mobile	$2,400	3	0	7,252
Montgomery	0	0	713,952	727,742
Selma	0	0	175	3,710
Tuscaloosa	0	0	1,200	1,200
Arkansas:				
El Dorado	0	0	0	175
Fort Smith	500	1	5,440	12,545
Hot Springs	1,000	1	0	1,200
Little Rock	0	0	900	8,512
Texarkana	0	0	900	3,400
Kentucky:				
Ashland	0	0	0	0
Covington [1]	0	0	300	2,400
Fort Thomas	6,000	2	0	6,000
Frankfort	1,280	2	0	1,280
Kentucky—Con.				
Henderson	0	0	0	0
Lexington	0	0	$395	$10,059
Louisville	$19,500	3	36,375	99,925
Middlesboro	0	0	0	0
Newport	0	0	1,500	1,500
Owensboro	1,000	1	40	1,290
Paducah	3,000	3	0	3,000
Louisiana:				
Alexandria	0	0	0	5,940
Lafayette	0	0	700	720
Monroe	0	0	100,150	104,300
New Orleans	10,500	2	8,000	29,673
Shreveport	12,075	5	503,950	538,489
Mississippi:				
Clarksdale	500	1	0	1,300
Columbus	0	0	0	0
Gulfport	0	0	200	200
Hattiesburg	800	1	0	1,950
Jackson	0	0	2,000	9,175
Laurel	0	0	0	0
Vicksburg	0	0	0	260

[1] Not included in totals.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

South Central States—Continued

City and State	New residential buildings		New nonresidential buildings	Total (including repairs)
	Estimated cost	Families provided for		
Oklahoma:				
Ada	$1,000	1	0	$1,000
Ardmore	0	0	$940	940
Bartlesville	0	0	0	1,206
Chickasha	0	0	0	435
Enid	0	0	16,125	16,125
McAlester	0	0	200	200
Oklahoma City	6,800	6	340,850	354,300
Okmulgee	0	0	0	1,000
Ponca City	0	0	0	0
Sapulpa	0	0	0	1,000
Shawnee	0	0	1,300	3,600
Tulsa	0	0	122,066	133,602
Tennessee:				
Chattanooga	1,000	1	38,500	91,044
Jackson	0	0	0	0
Johnson City	5,500	1	0	5,555
Kingsport	0	0	450	450
Knoxville	0	0	20,498	25,640
Memphis	2,600	1	140,140	192,400
Nashville	1,500	3	296,842	315,930
Texas:				
Abilene	2,000	1	33,000	35,250
Austin	10,509	7	8,710	30,788
Beaumont	0	0	315	9,487
Big Spring	0	0	0	1,870
Cleburne	0	0	0	425
Corpus Christi	1,100	2	58,839	61,449
Texas—Contd.				
Corsicana	0	0	$16,000	$16,750
Dallas	$32,910	20	25,125	155,547
Del Rio	0	0	330	2,234
Denison	1,550	2	0	2,110
El Paso	8,000	1	8,500	25,921
Fort Worth	24,300	6	18,420	49,920
Galveston	6,950	6	865	22,117
Greenville	0	0	225	225
Harlingen	0	0	980	3,830
Houston	76,650	16	62,390	160,425
Marshall [1]	1,040	2	450	2,080
Palestine	3,450	4	1,190	6,255
Pampa	4,000	2	0	6,950
Paris	500	1	0	2,975
Port Arthur [1]	2,500	3	1,073	9,689
San Angelo	2,500	2	0	6,684
San Antonio	11,692	11	463,884	439,606
Sherman	1,395	1	0	2,870
Sweetwater	0	0	400	3,170
Temple	2,200	3	0	3,200
Texarkana	3,420	1	0	3,640
Tyler	31,415	18	587	45,389
Waco	6,250	2	810	8,260
Wichita Falls	0	0	75	1,800
Total	307,746	144	2,998,503	3,878,301

Mountain and Pacific States

Arizona:				
Phoenix	$4,450	2	$9,406	$16,381
Tucson	0	0	500	23,756
California:				
Alameda	0	0	4,175	9,718
Alhambra	4,000	1	1,500	12,030
Anaheim	0	0	17,000	21,845
Bakersfield	5,200	2	485	10,790
Beverly Hills	43,000	9	13,900	96,096
Burbank	11,900	4	19,400	33,150
Eureka	0	0	280	805
Fresno	7,100	3	925	35,860
Fullerton	0	0	0	3,825
Gardena	0	0	500	1,580
Glendale	28,650	6	13,215	46,590
Huntington Park	5,550	2	9,165	18,691
Inglewood	21,500	2	0	22,800
Long Beach	23,400	13	45,550	379,455
Los Angeles	340,920	113	263,605	980,328
Modesto	0	0	4,500	6,463
Monrovia	1,900	1	640	6,900
Oakland	44,450	11	52,123	136,958
Ontario	1,200	1	14,415	16,260
Palo Alto	11,000	2	1,000	28,005
Pasadena	8,200	2	33,287	81,393
Pomona	2,000	1	50,100	67,512
Redlands	3,660	3	0	6,941
Riverside	6,480	2	980	13,479
Sacramento	17,400	5	7,500	52,328
Salinas	3,200	1	4,850	15,462
San Bernardino	2,000	2	80,200	89,436
San Diego	44,700	15	124,024	188,637
San Francisco	92,000	21	199,870	465,295
San Leandro	17,000	4	0	17,580
San Jose	5,700	2	44,620	64,760
San Mateo	0	0	1,000	8,600
California—Contd.				
Santa Ana	$3,000	1	$500	$10,751
Santa Barbara	0	0	760	7,215
Santa Cruz	8,375	7	400	11,950
Santa Monica	6,450	3	1,480	12,383
Santa Rosa	0	0	2,680	5,005
South Gate	2,000	1	3,500	9,432
South Pasadena	0	0	0	4,278
Stockton	5,300	2	405	35,241
Vallejo	10,800	4	2,610	19,950
Whittier	2,500	1	0	4,648
Colorado:				
Boulder	0	0	100	293
Colorado Springs	550	1	65	2,715
Denver	26,000	4	13,705	81,085
Fort Collins	0	0	125	1,430
Greeley	1,700	2	50	2,100
Pueblo	0	0	2,425	6,497
Idaho:				
Boise	0	0	325	6,928
Pocatello	0	0	0	4,500
Montana:				
Anaconda	0	0	0	0
Billings	9,450	4	150	10,822
Butte	0	0	0	400
Great Falls	0	0	225	1,325
Helena	1,010	2	0	2,260
Missoula	0	0	550	910
Nevada:				
Reno	0	0	0	5,700
New Mexico:				
Albuquerque	1,500	1	300	8,567
Oregon:				
Astoria	0	0	350	1,715
Eugene	0	0	2,415	5,103
Klamath Falls	0	0	575	1,425

[1] Not included in totals.

TABLE 11.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, JANUARY 1934—Continued

Mountain and Pacific States—Continued

City and State	New residential buildings: Estimated cost	New residential buildings: Families provided for	New nonresidential buildings	Total (including repairs)
Oregon—Contd.				
Medford	$6,500	2	0	$7,980
Portland	6,500	3	$123,140	234,925
Salem	0	0	190	3,316
Utah:				
Salt Lake City	0	0	2,687	33,950
Washington:				
Aberdeen	0	0	50	1,006
Bellingham	0	0	125	12,466
Bremerton	1,400	1	500	14,735
Hoquiam	0	0	0	2,675
Longview	0	0	0	2,688
Olympia	0	0	200	5,776
Port Angeles	0	0	0	$200
Seattle	$19,275	9	$204,185	314,241
Spokane	6,550	4	5,405	46,865
Tacoma	6,500	3	4,060	48,340
Walla Walla	0	0	1,535	2,660
Wenatchee	0	0	0	500
Yakima	0	0	80	2,280
Wyoming:				
Cheyenne	0	0	290	6,762
Total	881,920	285	1,394,857	3,985,702

Hawaii

City	New residential buildings	Families provided for	New nonresidential buildings	Total (including repairs)
Honolulu	$62,475	42	$20,625	$104,068

Loans Made by Home Owners' Loan Corporation [1]

UNDER the Home Owners' Loan Act, signed June 13, 1933, the Home Owners' Loan Corporation was given the power to make loans to distressed home owners unable to meet their obligations on the home properties being purchased by them. For this purpose the corporation was given $200,000,000 appropriated by the Federal Government, and was authorized to issue $2,000,000,000 in 4-percent bonds whose interest is guaranteed by the Government for 18 years.

During the 7 weeks ending February 16, 1934, the network of 243 offices set up under this authorization closed loans involving mortgages aggregating $139,262,761. There are several steps before a loan is closed. The field appraisers of the corporation inspect the property to see if it is eligible for a loan under the act and the mortgage holder is interviewed to determine whether he will agree to accept bonds of the corporation in exchange for his mortgage. Final steps after the tentative approval include an appraisal by an appraiser representing the home owner and a review of all appraisals by the corporation to assure that every legal and financial safeguard has been

[1] Data are from press release of Home Owners' Loan Corporation, Feb. 21, 1934.

thrown around the transaction. The actual physical transfer of interim certificates representing the bond then takes place.

Since the system has been in operation actual payment of loans has taken place in 85,093 cases, involving mortgages to the amount of $242,520,619. More than 99 percent of this total ($240,550,118), was arranged for on the bond-exchange basis.

Cash loans on unmortgaged homes, allowable up to 50 percent of the value of the house, have averaged $665 per loan; and cash loans on mortgaged homes, allowable up to 40 percent of value, in urgent cases in which the mortgagee refuses to accept the corporation's bonds, have averaged $1,496. The average of all classes of loans up to January 19, 1934, was $2,850.

Housing Conference in Washington, D.C.

ON JANUARY 27, 1934, an all-day conference on housing was held in Washington under the auspices of the National Public Housing Conference. The purpose, as explained by Mrs. Mary K. Simkhovitch, the president of the conference, was to bring together those interested in the social rather than the commercial aspects of housing in order to take a new measure of the problem of providing decent dwelling accommodations for American wage earners at rents they can afford to pay, to consider the effectiveness of the public works program in relation to this problem, and to plan for and encourage the formation of local bodies and the passage of local housing laws enabling communities to take advantage of the help the Government is prepared to give. The speakers at the Washington gathering included a number of persons well known for their interest in the housing problem, some of them being officially connected with the Recovery Administration. Secretary Ickes and Mrs. Roosevelt were the principal speakers at the luncheon meeting, others being Dr. Isador Lubin, United States Commissioner of Labor Statistics, Miss Grace Abbott, Chief of the Children's Bureau, and Langdon W. Post, tenement house commissioner of the city of New York. Among the speakers at the other meetings were Dr. Edith Elmer Wood; Frederic C. Howe, consumers' counsel for the Agricultural Adjustment Administration; M. H. Hedges, research director of the International Brotherhood of Electrical Workers; Robert D. Kohn, director of housing under the Public Works Administration; Rev. John O'Grady, of the National Conference of Catholic Charities; Dr. Sidney E. Goldstein, of the Central Conference of American Rabbis; and a number of others representing bodies interested in the question of public housing.

Public aid to housing has become a necessity, it was claimed, because private enterprise does not and cannot provide for the lower income classes housing which reaches a socially permissible minimum

standard. High cost of land, high cost of credit and of building, and heavy taxation on buildings combine to bring up the cost of housing, while the wages of large classes of workers are too low to permit them to pay economic rents for the housing thus provided. Data as to average income for different classes and average rent per room for housing erected within recent years were given to substantiate this view. Dr. Lubin gave figures showing that in 1929, at the height of the so-called good times, if the average wage earner spent for housing one fifth of his income (long considered the proper proportion for this item), he could pay a monthly rent of from $21.50 to $23.50, or around $6 a month per room for a home of 3½ rooms. Dr. Frederic Howe pointed out that as civilization has advanced it has been found necessary to turn over for public administration one activity after another formerly carried on by private interests. Fire and police protection, sewage disposal, and water supply were instanced as examples of this process. Housing for the lower income classes is peculiarly suitable for this treatment, since a considerable part of the difficulty of providing it comes from high land values, which in turn come from conditions of community occupancy, not from services rendered by their owners. The community might well, therefore, through taxation devote to the provision of decent housing for its poorer members a part of these values which it has created.

Mrs. Roosevelt approved of the present program of Government aid, but gave a caution against relying too much on such action for clearing out slums and providing needed housing. A considerable part of the housing difficulty, she felt, rose from the fact that people who owned property had been inclined to look upon land not as a regular source of income, but as an investment on which to make a great deal of money. "They have exploited their property expecting to get out of it more than they have put into it. This situation will have to change." Public opinion, she felt, must be the agency for bringing about this change.

Secretary Ickes stressed the importance of an almost "revolutionary improvement" in housing conditions for the lower income groups. He outlined the creation of the Federal Housing Corporation, to which $100,000,000 has been allotted from public works funds, and explained that in addition to this the Public Works Administration has assigned many millions to limited-dividend companies engaged in low-cost housing enterprises. Although the Federal housing projects would be almost negligible as compared with the need, they would at least make a beginning, and might be looked on as serving the purpose of housing clinics. "They will demonstrate what can be done and will serve, we hope, to stimulate public interest to such a point that States and municipalities will take up the work and carry it on as a major social activity." The housing program can be

justified as a means of providing employment, since housing is one of the best, if not the very best, make-work propositions that can be undertaken, but a better justification, he felt, is the social benefit which must arise from providing decent living conditions for those who lack them.

Dr. Wood made a strong plea for research, in order that housing work may be carried on more intelligently. There is need to know just where definitely bad housing exists, how extensive it is, whether the present buildings can be reconditioned or whether slum clearance must be resorted to, and until such details are in hand it is difficult to make sure that the most important work is done first. There is need, too, for study of the badly housed tenants. Their race, their income, the number of children and size of families, and the amount they might reasonably be expected to pay for rent, are all factors having an important bearing on the question of what ought to be done.

Mr. Post stressed the effect of interest charges in bringing up the cost of housing, and urged that the Government, when making housing loans, should charge only the rate of interest at which it had itself borrowed the money. This, he held, would make the aid truly effective, and at the same time, since the Federal Government has taken the stand that it is justified in subsidizing slum clearance and low-cost housing, in making such a reduction it would only be carrying out this stand in a fair and logical manner.

Before adjournment the conference passed the following resolution:

1. As an immediate and permanent policy, we urge the creation of public housing authorities in States having the necessary enabling legislation, and the passage of such legislation in other States which are now without it.

2. In States where public authorities do not now exist or cannot immediately be legally created, we urge that demonstrations be started at once by the Public Works Emergency Housing Corporation as the most effective means of educating in the possibilities of slum clearance and decent low-cost housing for wage earners, and as an important aid to solving the unemployment problem.

3. We are in hearty sympathy with President Roosevelt's statement to a committee of this conference this afternoon, that the most effective step in the housing program for the immediate future is to make the dirt fly on sound demonstrations.

4. We are convinced that this action will do more than anything else to assure the future of public housing and to secure increased appropriations from Federal and other governmental funds. If the money already appropriated is wisely and speedily spent additional appropriations will certainly be forthcoming.

5. The members of this conference pledge themselves vigorously to initiate in their own communities such action as may be necessary to achieve the objectives set forth above.

WAGES AND HOURS OF LABOR

Average Wage and Salary Payments in Manufactures in Ohio, 1916 to 1932

By Fred C. Croxton, Columbus, Ohio, and Frederick E. Croxton, Columbia University

IN MANUFACTURING industries in Ohio, according to reports from practically all establishments employing three or more persons in that industry group, the average wage and salary payment to the group "wage earners" was $1,499 in 1929 and $960 in 1932.

The average for the group "bookkeepers, stenographers, and office clerks" was $1,792 in 1929 and $1,513 in 1932, and the average for the group "salespeople (not traveling)" was $2,171 in 1929 and $1,737 in 1932. The average for the three occupation groups combined was $1,535 in 1929 and $1,036 in 1932.

The decline in average wage and salary payments in manufactures during the 3 years from 1929 to 1932 was $539, or 36 percent, for wage earners; $279, or 15.6 percent, for bookkeepers, stenographers, and office clerks; $434, or 20 percent, for salespeople (not traveling); and $499, or 32.5 percent, for the three groups combined.

The changes in average wage and salary payments do not provide any measure of changes in rates of pay nor do the average wage and salary payments show full-time annual earnings for any year.

Average wage and salary payments shown in this study and in previous studies published in the Monthly Labor Review for January and February 1934 have been computed from reports furnished by Ohio employers immediately after the close of each calendar year. These reports show, among other items, the number of persons employed on the fifteenth of each month and the total wage and salary payments during the year. Employers are not requested to furnish, in connection with such annual reports, information concerning number or proportion of employees working full time, part time, and overtime, nor information relative to the extent to which they have "spread" work or shortened hours during slack periods or provided overtime during busy periods. The practice of spreading work through reduced hours for individual employees, groups of employees, or for the establishment as a whole was followed by many employers during the slack period following 1920 and has been followed very generally since 1929. Such plans, of course, merely dis-

tribute among the larger number of employees the available work and the wage and salary funds, so that all workers bear a part of the hardship resulting from reduced income.

The spreading of work during the slack periods following 1920 and 1929 was undoubtedly a considerable factor in reducing the average wage and salary payments during those two periods. Overtime work during the great industrial activity preceding these slack periods, on the other hand, increased the average wage and salary payments. It is not possible, however, from the data available, to determine the amount of part-time and overtime work during the 17 years covered by this study and to measure even approximately the effect of such conditions upon average wage and salary payments.

Sources and Scope of Study

THE study of average wage and salary payments in Ohio published in the Monthly Labor Review for January 1934 was a summary covering general industry groups (manufactures, wholesale and retail trade, service, transportation and public utilities, construction, agriculture, and fisheries). The second study (in the February issue) covered the industries classified under construction. The present study covers the 14 industry subgroups under manufactures.

The reports required by law and made annually to the Division of Labor Statistics of the Department of Industrial Relations of Ohio form the basis of these several studies. Reports were requested of all employers of 5 or more persons prior to 1924 and from employers of 3 or more from 1924 to 1932. Some reports were received each year from employers of fewer than 3 persons (fewer than 5 prior to 1924) and all such returns are included in the compilations. The number of establishments reporting varies from year to year, but the returns are from identical establishments throughout the 12 months of each year. Reports are not requested concerning governmental employment and interstate transportation.

When measured by employment afforded, manufactures is the most important of the general industry groups previously mentioned. During the years 1916 to 1923, when reports were requested from employers of 5 or more persons, manufactures included from 64.5 to 73.6 percent of all employees covered and from 65 to 77.9 percent of total wage and salary payments. During the years 1924 to 1932, when reports were requested from employers of 3 or more persons, manufactures included 64.9 percent of all employees covered in 1925, but the percentage decreased each year, except in 1928 and 1929, until it was only 56.4 in 1932. Total wage and salary payments in manufactures in 1925 were 67.2 percent of the amount reported for all industries, with a decrease to 55.6 percent in 1932. Table 1 shows the percentage for each year 1916 to 1932.

TABLE 1.—PERCENT EMPLOYMENT AND PAY ROLL IN MANUFACTURES FORM OF THOSE IN ALL INDUSTRIES IN OHIO, 1916-32

Year	Percent employees in manufactures form of all employees (average)	Percent pay roll in manufactures forms of that in all industries	Year	Percent employees in manufactures form of all employees (average)	Percent pay roll in manufactures forms of that in all industries
1916	73.5	75.2	1925	64.9	67.2
1917	72.9	75.4	1926	63.9	65.8
1918	73.6	77.9	1927	62.3	64.3
1919	72.4	75.8	1928	62.6	65.1
1920	70.7	74.3	1929	63.1	65.4
1921	64.5	65.0	1930	59.4	60.9
1922	66.9	69.2	1931	57.4	57.5
1923	67.8	68.9	1932	56.4	55.6
1924	64.4	66.0			

Table 2 shows the coverage in Ohio of the United States Census biennial reports on manufactures and the reports of the Ohio Division of Labor Statistics. Prior to 1919 the census of manufactures was taken every 5 years. Census figures include Ohio manufacturing concerns with "value of product" of $500 or more in 1919 and $5,000 or more in other years covered. The Ohio reports, on the other hand, include only a comparatively few establishments employing fewer than 3 persons (fewer than 5 prior to 1924). The census figures therefore include a number of small manufacturing establishments not requested to furnish information to the Ohio Division of Labor Statistics.

TABLE 2.—COMPARISON OF COVERAGE OF CENSUS REPORTS ON MANUFACTURES IN OHIO AND OF REPORTS (MANUFACTURES ONLY) OF OHIO DIVISION OF LABOR STATISTICS, BIENNIALLY FROM 1919 TO 1931

Year	Establishments		Wage earners (average)		Total wage and salary payments to wage earners	
	United States census	Ohio report	United States census	Ohio report	United States census	Ohio report
1919	16,125	9,011	730,733	678,525	$944,651,734	$872,014,593
1921	11,479	8,632	494,288	460,671	627,032,666	576,968,355
1923	11,195	8,701	669,132	654,142	979,659,869	933,989,207
1925	11,131	9,502	676,661	651,944	975,738,405	956,106,644
1927	10,961	9,880	669,097	649,111	968,181,165	950,200,395
1929	11,855	10,035	741,143	718,108	1,102,166,499	1,076,213,730
1931	[1] 9,883	9,683	[1] 506,974	482,782	[1] 593,051,176	571,917,215

[1] Press release, Bureau of the Census, Apr. 1, 1933.

Table 3 shows the percent of wage earners and of total wage and salary payments to wage earners in manufactures covered by the Ohio reports as compared with the United States census reports on manufactures.

TABLE 3.—COVERAGE OF OHIO REPORTS (MANUFACTURES ONLY) AS COMPARED WITH CENSUS REPORTS ON MANUFACTURES IN OHIO, BIENNIALLY FROM 1919 TO 1931

Year	Percent Ohio coverage forms of census coverage as regards—	
	Number of wage earners (average)	Wage and salary payments to wage earners
1919	92.9	92.3
1921	93.2	92.0
1923	97.8	95.3
1925	96.3	98.0
1927	97.0	98.1
1929	96.9	97.6
1931	95.2	96.4

Total Wage and Salary Payments, and Numbers Employed

TOTAL wage and salary payments paid in manufactures as reported to the Division of Labor Statistics of Ohio are shown for each year from 1916 to 1932 in table 4. Payments are reported separately for each of four occupation groups—wage earners; bookkeepers, stenographers, and office clerks; salespeople (not traveling); and superintendents and managers. Payments and other data relating to superintendents and managers are not included in any other tables or computations in this study. Employers were requested to report each year total wage and salary payments in dollars, including bonuses and premiums and value of board and lodging furnished. Employers were instructed not to include in their reports salary payments to officials. Total wage and salary payments (omitting superintendents and managers) in manufactures increased rapidly from 1916 to 1920, decreased 46.8 percent in 1921, increased each of the next 2 years, decreased slightly in 1924, increased for 2 years, decreased slightly in 1927, increased in 1928 and 1929, and decreased very rapidly from 1929 to 1932. The highest total paid was in 1920 and the second highest in 1929. The lowest total was in 1932. The decrease from 1920 to 1932 was $795,473,102, or 62.5 percent.

TABLE 4.—TOTAL WAGE AND SALARY PAYMENTS IN MANUFACTURES IN OHIO, 1916-32, BY GENERAL OCCUPATION GROUPS

Year	Number of establishments	Wage and salary payments to—					
		Wage earners	Bookkeepers, stenographers and office clerks	Salespeople (not traveling)	Total of preceding	Superintendents and managers	Grand total
1916	8,308	$483,223,146	$43,999,761	$7,245,967	$534,468,874	$22,137,792	$556,606,666
1917	8,608	625,127,087	56,367,407	6,808,428	688,302,922	26,874,017	715,176,939
1918	8,858	810,785,446	72,401,476	7,633,182	890,820,104	34,550,921	925,371,025
1919	9,011	872,014,593	99,616,384	9,022,859	980,653,836	46,296,998	1,026,950,834
1920	9,652	1,143,662,785	118,045,344	11,363,308	1,273,071,437	51,667,818	1,324,739,255
1921	8,632	[1] 576,968,355	[1] 89,700,261	11,194,833	[1] 677,863,449	46,048,958	[1] 723,912,407
1922	8,330	693,948,886	118,786,876	10,629,989	823,365,751	45,706,009	869,071,760
1923	8,701	933,989,207	105,092,484	12,959,685	1,052,041,376	51,259,820	1,103,301,196
1924	9,125	867,024,674	108,441,736	13,865,043	989,331,453	51,142,061	1,040,473,514
1925	9,502	956,106,644	116,531,491	17,046,075	1,089,684,210	56,133,781	1,145,817,991
1926	9,704	973,197,214	121,169,678	17,225,427	1,111,592,319	58,268,417	1,169,860,736
1927	9,880	950,200,395	127,339,270	17,821,103	1,095,360,768	58,822,884	1,154,183,652
1928	9,937	1,000,676,770	126,630,061	18,073,918	1,145,380,749	59,420,091	1,204,800,840
1929	10,035	1,076,213,730	141,959,719	20,198,389	1,238,371,838	62,777,638	1,301,149,476
1930	10,011	806,211,539	141,830,517	10,326,936	958,368,992	60,396,459	1,018,765,451
1931	9,683	571,917,215	109,165,152	9,135,088	690,217,455	50,905,300	741,122,755
1932	9,102	383,603,906	85,497,253	8,497,176	477,598,335	38,432,348	516,030,683

[1] Details for specific industries exceed total for the manufactures industry by $21 ($20 for wage earners and $1 for bookkeepers, stenographers, and office clerks).

Table 5 shows the average number of persons reported employed in manufactures each year, 1916 to 1932, in each of the three general occupation groups and for all groups combined. Both sexes are included. Employers in their annual reports show the number employed on the 15th of each month and the average was computed by dividing the sum of the numbers reported for each month of the year by 12. The highest average number employed was in 1929, the second highest in 1920, and the lowest in 1932. The decrease in average number employed from 1929 to 1932 was 345,424, or 42.8 percent.

TABLE 5.—AVERAGE NUMBER OF PERSONS (BOTH SEXES) REPORTED EMPLOYED IN MANUFACTURES, 1916-32, BY GENERAL OCCUPATION GROUPS

Year	Establishments	Wage-earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	8,299	628,208	49,079	5,035	682,322
1917	8,600	682,379	55,741	5,316	743,436
1918	8,858	699,656	62,155	5,103	766,914
1919	9,011	678,525	68,249	5,346	752,121
1920	9,652	715,858	73,035	5,735	794,627
1921	8,632	460,671	57,965	5,680	524,316
1922	8,403	546,435	57,550	5,919	609,903
1923	8,701	654,142	65,538	6,363	726,043
1924	9,125	606,558	65,963	7,002	679,523
1925	9,502	651,944	68,387	7,657	727,988
1926	9,704	671,910	71,195	8,234	751,340
1927	9,880	649,111	71,769	8,371	729,250
1928	9,937	669,039	72,041	8,355	749,434
1929	10,035	718,108	79,197	9,302	806,607
1930	10,011	590,506	77,702	4,969	673,178
1931	9,683	482,782	65,011	5,112	552,905
1932	9,102	399,790	56,500	4,893	461,183

The fluctuation in employment in manufactures within each year is shown in table 6. The least variation from maximum employment within a year was 3.1 percent in 1917, and the greatest was 26.9 percent in 1920. The fluctuation was more than 11 percent of the maximum for the year in 10 of the 17 years covered. The month of maximum employment during the 17-year period was March 1920 and the month of minimum employment was August 1932. The variation from maximum to minimum for the 17 years was 427,177, or 49.8 percent. The second highest number employed was in May 1929. The maximum employed during 1932 was slightly below the minimum employed in any other year in the period covered by the study.

TABLE 6.—FLUCTUATION IN EMPLOYMENT (BOTH SEXES) IN MANUFACTURES; 1916–32

[Includes the 3 general occupation groups—wage earners; bookkeepers, stenographers, and office clerks; and salespeople (not traveling)]

Month	1916	1917	1918	1919	1920	1921
January	612,838	730,008	728,224	731,343	841,071	542,341
February	643,360	738,585	739,834	716,585	834,445	536,545
March	661,690	753,422	759,095	713,013	857,366	530,071
April	669,106	741,361	753,425	709,252	846,274	530,598
May	672,247	748,464	767,878	706,836	824,476	529,435
June	687,933	751,979	784,098	728,345	844,531	524,630
July	684,107	742,324	790,880	761,881	835,352	499,263
August	700,054	743,490	793,976	788,524	801,398	508,228
September	706,418	743,536	775,796	794,472	785,346	512,913
October	708,185	745,270	778,696	759,045	750,158	521,458
November	717,977	747,249	774,308	793,552	688,556	531,039
December	723,949	735,548	756,752	822,599	626,562	525,271
Maximum	723,949	753,422	793,976	822,599	857,366	542,341
Minimum	612,838	730,008	728,224	706,836	626,562	499,263
Variation from maximum:						
Number	111,111	23,414	65,752	115,763	230,804	43,078
Percent	15.3	3.1	8.3	14.1	26.9	7.9
Establishments reporting	8,299	8,600	8,858	9,011	9,652	8,632

Month	1922	1923	1924	1925	1926	1927
January	507,562	688,264	709,872	696,498	733,130	710,987
February	530,843	711,427	726,175	705,748	741,602	736,762
March	556,100	740,836	733,686	717,741	749,195	751,444
April	574,924	741,235	723,205	721,615	754,479	750,988
May	598,326	749,373	687,200	725,959	750,771	749,004
June	629,447	756,243	644,854	724,881	753,283	748,332
July	631,922	732,935	631,913	722,264	747,934	727,987
August	644,406	736,158	642,840	729,413	758,375	726,733
September	646,186	722,905	661,455	746,969	775,597	731,609
October	651,612	719,014	666,443	753,087	770,615	720,407
November	662,224	714,338	657,252	749,713	749,377	701,771
December	685,289	702,784	669,383	741,970	731,723	694,980
Maximum	685,289	756,243	733,686	753,087	775,597	751,444
Minimum	507,562	688,264	631,913	696,498	731,723	694,980
Variation from maximum:						
Number	177,727	67,979	101,773	56,589	43,874	56,464
Percent	25.9	9.0	13.9	7.5	5.7	7.5
Establishments reporting	8,403	8,701	9,125	9,502	9,704	9,880

TABLE 6.—FLUCTUATION IN EMPLOYMENT (BOTH SEXES) IN MANUFACTURES, 1916–32—Continued

Month	1928	1929	1930	1931	1932
January	689, 774	784, 410	708, 893	564, 729	489, 708
February	719, 446	808, 359	712, 557	572, 525	496, 479
March	734, 971	819, 917	711, 876	581, 691	489, 228
April	736, 907	827, 839	721, 938	585, 839	475, 021
May	746, 657	835, 820	715, 937	583, 543	465, 873
June	750, 921	834, 405	695, 838	571, 996	460, 345
July	752, 001	831, 223	664, 999	555, 230	444, 690
August	766, 243	824, 563	652, 518	541, 745	430, 189
September	779, 492	823, 718	647, 883	540, 331	445, 724
October	778, 660	808, 934	634, 641	522, 918	449, 596
November	770, 132	755, 581	611, 376	513, 669	446, 593
December	765, 007	724, 513	599, 679	500, 647	440, 745
Maximum	779, 492	835, 820	721, 938	585, 839	496, 479
Minimum	689, 774	724, 513	599, 679	500, 647	430, 189
Variation from maximum:					
Number	89, 718	111, 307	122, 259	85, 192	66, 290
Percent	11. 5	13. 3	16. 9	14. 5	13. 4
Establishments reporting	9, 937	10, 035	10, 011	9, 683	9, 102

A comparison of the biennial changes in average number of wage earners employed and in total wage and salary payments as reported by the United States Census of Manufactures and as shown in the reports of the Division of Labor Statistics is presented in table 7. The change recorded by the two series of reports is in the same direction each biennium except in 1923–25, when the change was very slight. There is a remarkable agreement in the degree of change except in the biennium 1921–23.

TABLE 7.—BIENNIAL CHANGES IN AVERAGE NUMBER OF WAGE EARNERS EMPLOYED AND IN TOTAL WAGE AND SALARY PAYMENTS TO WAGE EARNERS IN MANUFACTURES: COMPARISON OF OHIO REPORTS AND CENSUS REPORTS ON MANUFACTURES IN OHIO, 1919–31

Period	Wage earners (average)		Total wage and salary payments to wage earners	
	United States census	Ohio reports	United States census	Ohio reports
1919–21	−32. 4	−32. 1	−33. 6	−33. 8
1921–23	+35. 4	+42. 0	+56. 2	+61. 9
1923–25	+1. 1	−. 3	−. 4	+2. 4
1925–27	−1. 1	−. 4	−. 8	−. 6
1927–29	+10. 8	+10. 6	+13. 8	+13. 3
1929–31	−31. 6	−32. 8	−46. 2	−46. 9

Average Wage and Salary Payments

TABLE 8 shows average wage and salary payments in manufactures to each of the three general occupation groups and to all groups combined. These averages were computed by dividing the total wage and salary payments by the average number employed. The highest average wage and salary payment was reported for wage earners and for all groups combined in 1920, for bookkeepers, stenographers, and

office clerks in 1922, and for salespeople (not traveling) in 1925. The lowest average payment was reported for all except salespeople in 1916 and for salespeople (not traveling) in 1917. Charts 1 and 2 show in graphic form average wage and salary payments to all employees in manufactures and to each of the three general occupation groups.

It should be emphasized that, as explained in the introductory section of this study, average wage and salary payments as here computed do not show average full-time earnings, as data concerning part-time and overtime work are not available. The changes in averages from year to year, also, do not afford any measure of changes in wage or salary scales or rates of pay.

TABLE 8.—AVERAGE WAGE AND SALARY PAYMENTS IN MANUFACTURES, 1916 TO 1932, BY GENERAL OCCUPATION GROUPS

Year	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	[1] 8,299	$769	$897	$1,439	$783
1917	[2] 8,600	916	1,011	1,281	926
1918	8,858	1,159	1,165	1,496	1,162
1919	9,011	1,285	1,460	1,688	1,304
1920	9,652	1,598	1,616	1,981	1,602
1921	8,632	1,252	1,547	1,971	1,263
1922	[3] 8,403	1,270	[4] 2,064	1,796	1,330
1923	8,701	1,428	1,604	2,037	1,449
1924	9,125	1,429	1,644	1,980	1,456
1925	9,502	1,467	1,704	2,226	1,467
1926	9,704	1,448	1,702	2,092	1,479
1927	9,880	1,464	1,774	2,129	1,502
1928	9,937	1,496	1,758	2,163	1,528
1929	10,035	1,499	1,792	2,171	1,555
1930	10,011	1,365	1,825	2,078	1,424
1931	9,683	1,185	1,679	1,787	1,248
1932	9,102	960	1,513	1,737	1,096

[1] The number of establishments reporting employees was 8,299, the number reporting total wage and salary payments was 8,308.
[2] The number of establishments reporting employees was 8,600, the number reporting total wage and salary payments was 8,608.
[3] The number of establishments reporting employees was 8,403, the number reporting total wage and salary payments was 8,330.
[4] This figure, which is in accord with number employed and total wage and salary payments as tabulated by the Division of Labor Statistics, seems high. No further verification is possible as original schedules have been destroyed. The average for 1922 has been omitted from chart 2.

The United States Census Bureau does not compute average annual wage payments in compiling the biennial census of manufactures.[1] For this study, however, such averages have been computed and are shown in table 9 which compares average wage and salary payments to wage earners in manufactures based on the Ohio Division of Labor Statistics data with computed average payments to wage earners in manufactures in Ohio based upon the census reports. The two series show a remarkable agreement.

[1] In a report recently issued covering the construction industry, the Census Bureau computed the average annual wage payment in that industry.

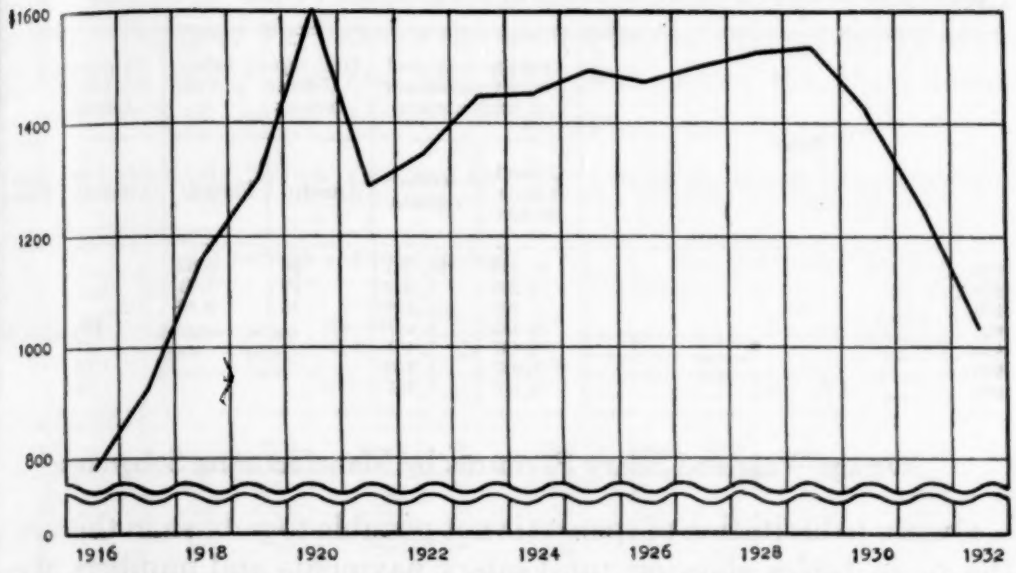


FIGURE 1.—AVERAGE WAGE AND SALARY PAYMENTS IN MANUFACTURES, 1916–32, ALL EMPLOYEES

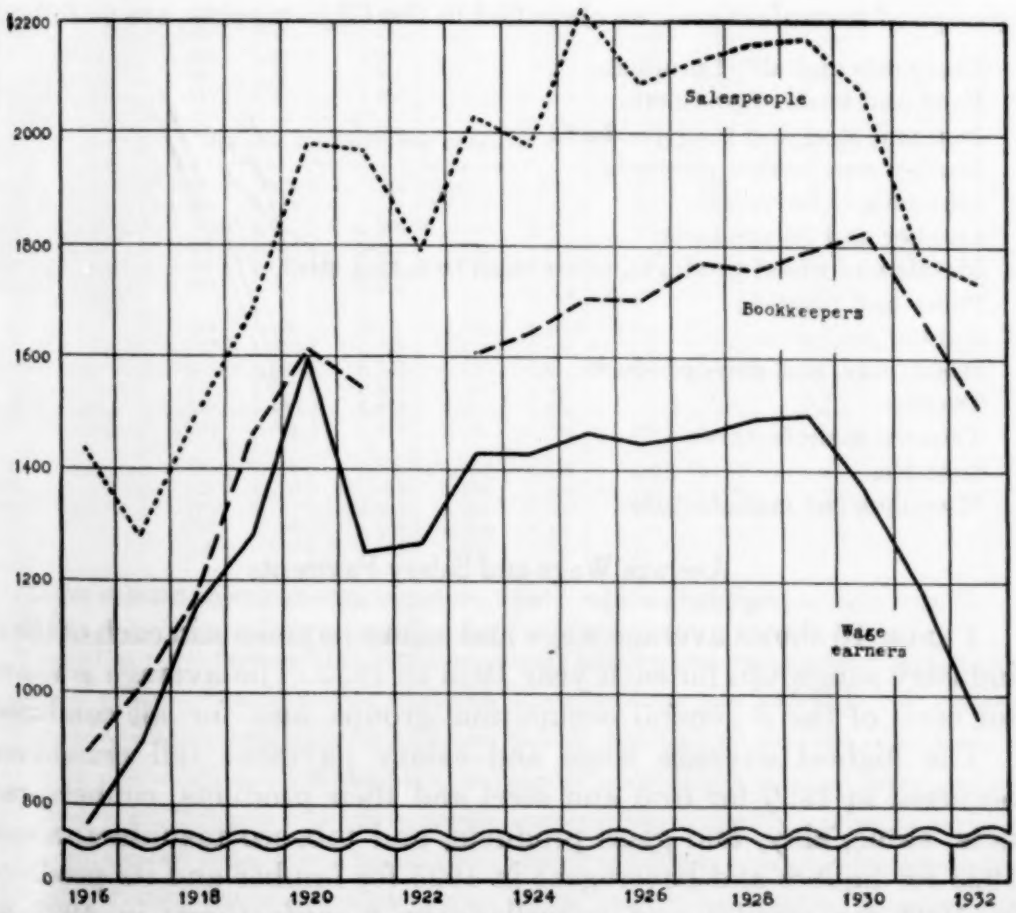


FIGURE 2.—AVERAGE WAGE AND SALARY PAYMENTS IN MANUFACTURES, 1916–32, BY GENERAL OCCUPATION GROUPS

TABLE 9.—COMPUTED AVERAGE WAGE AND SALARY PAYMENTS TO WAGE EARNERS IN MANUFACTURES: COMPARISON OF OHIO REPORTS AND CENSUS REPORTS ON MANUFACTURES IN OHIO, BIENNIALLY FROM 1919 TO 1931

Year	Average wage and salary payments to wage earners		Ohio reports below United States census		Ohio reports above United States census	
	United States census	Ohio reports	Amount	Percent	Amount	Percent
1919	$1,293	$1,285	$8	0.62		
1921	1,269	1,252	17	1.34		
1923	1,464	1,428	36	2.46		
1925	1,442	1,467			$25	1.73
1927	1,447	1,464			17	1.17
1929	1,487	1,499			12	.81
1931	1,170	1,185			15	1.28

Average Wage and Salary Payments by Manufacturing Subgroups

OWING to limitation of space it is not possible to publish in this article the basic tables showing total salary payments and numbers of employees by subgroups of manufactures. From these basic tables, however, there have been computed the average wage and salary payments in each of the subgroups for each year from 1916 to 1932. The subgroups of manufactures, as classified in the Ohio reports, are as follows:

Chemicals and allied products.
Food and kindred products.
Iron and steel and their products.
Leather and leather products.
Liquors and beverages.
Lumber and its products.
Metals and metal products, other than iron and steel.
Paper and printing.
Rubber products.
Stone, clay, and glass products.
Textiles.
Tobacco manufactures.
Vehicles.
Miscellaneous manufactures.

Average Wage and Salary Payments

TABLE 10 shows average wage and salary payments in each of the 14 industry subgroups for each year 1916 to 1932. The average is shown for each of the 3 general occupation groups and for all combined.

The highest average wage and salary payment (all employees) occurred in 1920 for iron and steel and their products, rubber products, stone, clay, and glass products, and tobacco manufactures; in 1923 for liquors and beverages; in 1925 for lumber and its products; in 1926 for textiles and miscellaneous manufactures; in 1927 for leather and leather products and vehicles; in 1928 for chemicals and allied products, food and kindred products, and paper and printing; and in 1929 for metals and metal products, other than iron and steel.

The lowest average wage and salary payments occurred in 1916 for all industry subgroups except liquors and beverages, where it occurred in 1917. The year 1917 shows the second lowest average for 12 of the 14 industry subgroups and the year 1932 shows the third lowest average for 8 of the 14 industry subgroups.

TABLE 10.—AVERAGE WAGE AND SALARY PAYMENTS IN EACH INDUSTRY SUBGROUP IN MANUFACTURES, 1916-32, BY GENERAL OCCUPATION GROUPS

Year	Chemicals and allied products					Food and kindred products				
	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	[1] 317	$743	$879	[2]	$768	[3] 1,289	$674	$814	$912	$702
1917	340	887	914	[2]	894	[4] 1,364	723	832	994	751
1918	351	1,074	1,120	[2]	1,091	1,439	907	1,053	1,266	941
1919	369	1,222	1,187	[2]	1,218	1,475	1,061	1,180	1,348	1,091
1920	411	1,465	1,491	[2]	1,470	1,601	1,287	1,350	1,696	1,322
1921	360	1,305	1,390	[2]	1,324	1,426	1,222	1,383	1,532	1,262
1922	[5] 373	1,267	1,419	[2]	1,301	[6] 1,243	1,125	1,424	1,450	1,180
1923	382	1,379	1,451	[2]	1,398	1,278	1,235	1,416	1,500	1,274
1924	392	1,437	1,600	[2]	1,468	1,366	1,255	1,537	1,623	1,315
1925	412	1,437	1,587	[2]	1,477	1,433	1,252	1,434	1,704	1,315
1926	415	1,438	1,629	[2]	1,481	1,498	1,219	1,451	1,628	1,284
1927	433	1,459	1,559	[2]	1,485	1,601	1,317	1,463	1,627	1,366
1928	444	1,470	1,696	[2]	1,522	1,617	1,343	1,504	1,682	1,395
1929	457	1,475	1,656	[2]	1,518	1,636	1,331	1,499	1,677	1,386
1930	458	1,462	1,683	[2]	1,520	1,715	1,363	1,475	1,307	1,371
1931	461	1,370	1,788	[2]	1,468	1,685	1,212	1,409	1,237	1,232
1932	440	1,220	1,586	[2]	1,305	1,600	1,067	1,298	1,192	1,093

Year	Iron and steel and their products					Leather and leather products				
	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	[7] 1,490	$879	$993	[8]	$893	[9] 161	$571	$606	[2]	$574
1917	[1] 1,583	1,073	1,111	$2,429	1,077	160	635	672	[2]	638
1918	1,635	1,377	1,285	2,375	1,372	161	770	858	[2]	776
1919	1,687	1,534	1,442	2,442	1,528	156	938	1,039	[2]	945
1920	1,797	1,874	1,669	2,978	1,859	158	1,123	1,134	[2]	1,125
1921	1,667	1,327	1,665	[8]	1,372	144	1,074	1,318	[2]	1,091
1922	[10] 1,613	1,428	[8]	2,626	1,598	[5] 138	1,072	1,298	[2]	1,088
1923	1,647	1,656	1,707	3,421	1,664	145	1,089	1,355	[11]	[13] 1,104
1924	1,673	1,609	1,718	3,727	1,624	138	1,087	1,311	[2]	1,105
1925	1,717	1,675	1,841	4,107	1,695	141	1,078	1,325	[2]	1,096
1926	1,750	1,640	1,843	3,274	1,662	147	1,103	1,463	[2]	1,129
1927	1,700	1,621	1,922	3,041	1,652	137	1,113	1,552	[2]	1,144
1928	1,751	1,686	1,782	3,362	1,699	130	1,092	1,473	[2]	1,118
1929	1,775	1,705	1,980	3,344	1,734	126	1,096	1,461	[2]	1,122
1930	1,754	1,541	2,034	2,997	1,599	119	922	1,395	[11]	[12] 954
1931	1,697	1,260	1,621	2,578	1,305	110	864	1,323	[11]	[12] 892
1932	1,606	959	1,543	2,505	1,038	106	690	1,315	[11]	[12] 724

[1] Number of establishments reporting employees; number reporting total wage and salary payments was less by 2.
[2] Not computed, owing to small number involved.
[3] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 2.
[4] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 10.
[5] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 1.
[6] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 12.
[7] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 3.
[8] Omitted; apparent clerical error in reporting, which cannot be definitely corrected, as original schedules have been destroyed.
[9] Number of establishments reporting employees; number reporting total wage and salary payments was less by 1.
[10] Number of establishments reporting employees; number reporting total wage and salary payments was less by 90.
[11] Carried with "Manufactures, not otherwise classified", in detailed tabulation.
[12] Total wage and salary payments to salespeople (not traveling) deducted before computing this average, as average number in that group could not be determined from detailed tabulation.

TABLE 10.—AVERAGE WAGE AND SALARY PAYMENTS IN EACH INDUSTRY SUB-GROUP IN MANUFACTURES, 1916-32, BY GENERAL OCCUPATION GROUPS—Continued

Year	Liquors and beverages					Lumber and its products				
	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	192	$1,170	$1,094	(2)	$1,172	[13] 860	$617	$867	(2)	$640
1917	179	974	1,154	(2)	1,004	[3] 899	728	939	(2)	748
1918	182	1,137	1,286	(2)	1,160	913	892	1,064	(2)	907
1919	167	1,286	1,409	(2)	1,308	923	1,009	1,295	(2)	1,032
1920	150	1,754	1,551	(2)	1,732	1,003	1,271	1,457	(2)	1,288
1921	121	1,455	1,615	(2)	1,483	914	1,200	1,545	(2)	1,236
1922	120	1,351	1,549	(2)	1,393	[5] 932	1,089	1,437	(2)	1,123
1923	124	1,771	1,573	(2)	1,761	1,007	1,220	1,513	(2)	1,254
1924	140	1,492	1,499	(2)	1,516	1,130	1,218	1,618	(2)	1,259
1925	147	1,489	1,617	(2)	1,584	1,175	1,370	1,689	(2)	1,407
1926	153	1,428	1,594	(2)	1,493	1,206	1,265	1,629	(2)	1,310
1927	155	1,475	1,623	(2)	1,521	1,238	1,275	1,807	(2)	1,331
1928	150	1,491	1,560	(2)	1,553	1,215	1,280	1,652	(2)	1,329
1929	164	1,484	1,554	(2)	1,527	1,231	1,275	1,678	(2)	1,328
1930	163	1,470	1,566	(2)	1,522	1,192	1,178	1,717	(2)	1,244
1931	175	1,396	1,444	(2)	1,431	1,104	1,047	1,544	(2)	1,115
1932	158	1,200	1,243	(2)	1,233	999	834	1,359	(2)	904

Year	Metals and metal products other than iron and steel					Paper and printing				
	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	[3] 331	$699	$815	(2)	$715	[14] 928	$720	$741	$1,204	$735
1917	339	786	943	(2)	802	930	781	833	1,478	803
1918	395	1,113	1,060	(2)	1,110	939	909	835	1,200	907
1919	409	1,128	1,170	(2)	1,137	924	1,100	1,052	1,707	1,109
1920	457	1,416	1,410	(2)	1,422	977	1,412	1,295	1,939	1,409
1921	432	1,180	1,440	(2)	1,222	869	1,292	1,323	1,790	1,311
1922	[15] 406	1,154	1,544	(2)	1,199	[9] 886	1,328	1,319	2,002	1,345
1923	456	1,311	1,761	(2)	1,360	913	1,376	1,476	2,075	1,411
1924	471	1,302	1,549	(2)	1,333	980	1,420	1,446	2,116	1,445
1925	488	1,372	1,662	(2)	1,412	1,037	1,282	1,309	2,334	1,319
1926	488	1,382	1,710	(2)	1,423	1,075	1,478	1,466	2,354	1,503
1927	506	1,371	1,688	(2)	1,418	1,110	1,464	1,554	2,341	1,506
1928	523	1,422	1,705	(2)	1,466	1,130	1,508	1,979	2,637	1,605
1929	544	1,434	1,740	(2)	1,476	1,158	1,513	1,550	2,307	1,545
1930	549	1,355	1,809	(2)	1,411	1,151	1,473	1,621	2,354	1,516
1931	544	1,155	1,711	(2)	1,235	1,160	1,362	1,536	2,112	1,414
1932	531	973	1,477	(2)	1,047	1,139	1,192	1,356	1,997	1,250

[2] Not computed, owing to small number involved.
[3] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 2.
[5] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 1.
[9] Number of establishments reporting employees; number reporting total wage and salary payments was less by 1.
[13] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 7.
[14] Number of establishments reporting employees; number reporting total wage and salary payments was less by 7.
[15] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 4.

TABLE 10.—AVERAGE WAGE AND SALARY PAYMENTS IN EACH INDUSTRY SUB GROUP IN MANUFACTURES, 1916-32, BY GENERAL OCCUPATION GROUPS—Continued

Year	Rubber products					Stone, clay, and glass products				
	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	78	$810	$844	(2)	$815	712	$689	$891	(2)	$697
1917	82	1,042	1,032	(2)	1,041	702	829	1,003	(2)	836
1918	93	1,233	1,235	(2)	1,236	683	971	1,043	(2)	976
1919	108	1,288	2,463	(2)	1,434	693	1,145	1,252	(2)	1,151
1920	114	1,710	2,089	(2)	1,762	713	1,453	(8)	(2)	1,483
1921	107	1,465	1,817	(2)	1,520	637	1,209	1,421	(2)	1,220
1922	[3] 109	1,433	1,681	(2)	1,462	[16] 664	1,117	1,436	(2)	1,132
1923	119	1,589	1,717	(11)	[12] 1,602	674	1,188	1,533	(2)	1,204
1924	120	1,540	1,896	(2)	1,576	711	1,363	1,577	(2)	1,374
1925	113	1,553	1,906	(2)	1,586	762	1,359	1,624	(2)	1,374
1926	112	1,562	1,857	(2)	1,593	765	1,355	1,693	(2)	1,381
1927	128	1,583	1,936	(11)	[12] 1,619	768	1,330	1,686	(2)	1,351
1928	133	1,611	2,014	(11)	[12] 1,653	772	1,314	1,757	(2)	1,341
1929	127	1,562	2,033	(11)	[12] 1,610	770	1,319	1,796	(2)	1,348
1930	113	1,450	2,008	(11)	[12] 1,520	747	1,187	1,909	(2)	1,241
1931	104	1,254	1,985	(11)	[12] 1,341	708	1,096	1,780	(2)	1,145
1932	95	1,011	1,873	(11)	[12] 1,115	622	908	1,432	(2)	946
	Textiles					Tobacco manufactures				
1916	[17] 678	$536	$805	(2)	$558	242	$448	(2)	(2)	$457
1917	[18] 708	588	809	(2)	607	239	492	(2)	(2)	499
1918	757	700	1,032	(2)	724	246	558	(2)	(2)	571
1919	767	856	1,128	(2)	878	249	645	(2)	(2)	657
1920	810	1,054	1,382	(2)	1,081	269	948	(2)	(2)	957
1921	680	1,043	1,519	(2)	1,082	226	690	(2)	(2)	705
1922	[3] 689	967	1,378	(2)	998	[15] 210	693	(2)	(11)	[12] 705
1923	679	1,012	1,336	(2)	1,039	213	741	(2)	(11)	[12] 752
1924	687	1,039	1,396	(2)	1,070	191	553	(2)	(11)	[12] 562
1925	705	1,069	1,463	(2)	1,105	175	713	(2)	(11)	[12] 726
1926	707	1,080	1,360	(2)	1,107	172	717	(2)	(11)	[12] 729
1927	679	1,055	1,458	(2)	1,087	160	688	(2)	(11)	[12] 701
1928	662	1,035	1,417	(2)	1,066	157	676	(2)	(11)	[12] 691
1929	647	1,026	1,449	(2)	1,062	137	660	(2)	(11)	[12] 676
1930	627	954	1,502	(2)	996	144	627	(2)	(11)	[12] 643
1931	587	865	1,389	(2)	904	133	599	(2)	(11)	[12] 614
1932	567	705	1,303	(2)	746	127	507	(2)	(11)	[12] 525

[2] Not computed, owing to small number involved.

[3] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 2.

[8] Omitted; apparent clerical error in reporting, which cannot be definitely corrected, as original schedules have been destroyed.

[11] Carried with "Manufactures not otherwise classified", in detailed tabulation.

[12] Total wage and salary payments to salespeople (not traveling) deducted before computing this average, as average number in that group could not be determined from detailed tabulation.

[15] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 4.

[16] Number of establishments reporting employees; number reporting total wage and salary payments was less by 8.

[17] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 5.

[18] Number of establishments reporting employees; number reporting total wage and salary payments was less by 3.

TABLE 10.—AVERAGE WAGE AND SALARY PAYMENTS IN EACH INDUSTRY SUB-GROUP IN MANUFACTURES, 1916–32, BY GENERAL OCCUPATION GROUPS—Continued

Year	Vehicles					Miscellaneous manufactures				
	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees	Establishments	Wage earners	Bookkeepers, stenographers, and office clerks	Salespeople (not traveling)	All employees
1916	[1] 358	$789	$961	[2]	$801	[3] 663	$745	$898	[2]	$759
1917	360	946	1,132	[2]	959	[5] 715	822	1,039	[2]	845
1918	346	1,160	1,173	[2]	1,162	718	1,180	1,175	[2]	1,181
1919	390	1,394	1,383	[2]	1,394	694	1,161	1,262	[2]	1,176
1920	416	1,698	1,629	[2]	1,693	776	1,432	1,437	[2]	1,435
1921	363	1,364	1,611	[2]	1,401	686	1,206	1,436	[2]	1,247
1922	[19] 320	1,342	1,618	[2]	1,370	[20] 700	1,166	1,441	[2]	1,204
1923	331	1,538	1,719	[11]	[12] 1,552	733	1,224	1,504	[2]	1,273
1924	328	1,656	1,874	[2]	1,677	798	1,309	1,566	[2]	1,347
1925	319	1,631	1,842	[2]	1,650	878	1,341	1,835	[2]	1,410
1926	318	1,394	1,836	[2]	1,430	898	1,420	1,676	[2]	1,458
1927	319	1,687	2,004	[2]	1,731	946	1,387	1,785	[2]	1,443
1928	304	1,666	1,583	[2]	1,661	949	1,373	1,783	[2]	1,431
1929	304	1,609	1,647	[2]	1,622	959	1,379	1,823	[2]	1,441
1930	297	1,331	1,744	[2]	1,374	982	1,285	1,798	[2]	1,361
1931	265	1,174	1,910	[11]	[12] 1,242	950	1,196	1,825	[2]	1,297
1932	228	934	1,667	[11]	[12] 1,008	884	940	1,526	[2]	1,043

[1] Number of establishments reporting employees; number reporting total wage and salary payments was less by 2.
[2] Not computed, owing to small number involved.
[3] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 2.
[5] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 1.
[11] Carried with "Manufactures, not otherwise classified", in detailed tabulation.
[12] Total wage and salary payments to salespeople (not traveling) deducted before computing this average, as average number in that group could not be determined from detailed tabulation.
[19] Number of establishments reporting employees; number reporting total wage and salary payments was greater by 8.
[20] Number of establishments reporting employees; number reporting total wage and salary payments was less by 9.

General Indexes for Employment and for Wage and Salary Payments

GENERAL indexes for all employees (wage earners; bookkeepers, stenographers, and office clerks; and salespeople (not traveling)) and separately for wage earners in manufactures, based upon the Ohio reports, are shown in table 11. Indexes are here shown for average number employed, total wage and salary payments, and average wage and salary payments for 1924–32, which is the period during which reports were requested by the Ohio Division of Labor Statistics from all establishments employing three or more persons. The year 1926 was used as the base, or 100, in computing these indexes for the reason that it is the year used by the United States Bureau of Labor Statistics as the base in computing general indexes for employment and pay rolls in manufacturing.

The indexes for employees and for total wage and salary payments increased from 1924 to 1926, decreased in 1927, increased in 1928 and 1929, and decreased rapidly during 1930, 1931, and 1932. The index for average wage and salary payments increased in 1925, decreased

slightly in 1926, increased each year until 1929, and decreased in 1930, 1931, and 1932.

The course of the indexes for wage earners is the same as the indexes for all employees. The indexes for wage earners, however, do not reach as high a level in 1929 as do the indexes for all employees and in 1932 they reach a lower level than do those for all employees.

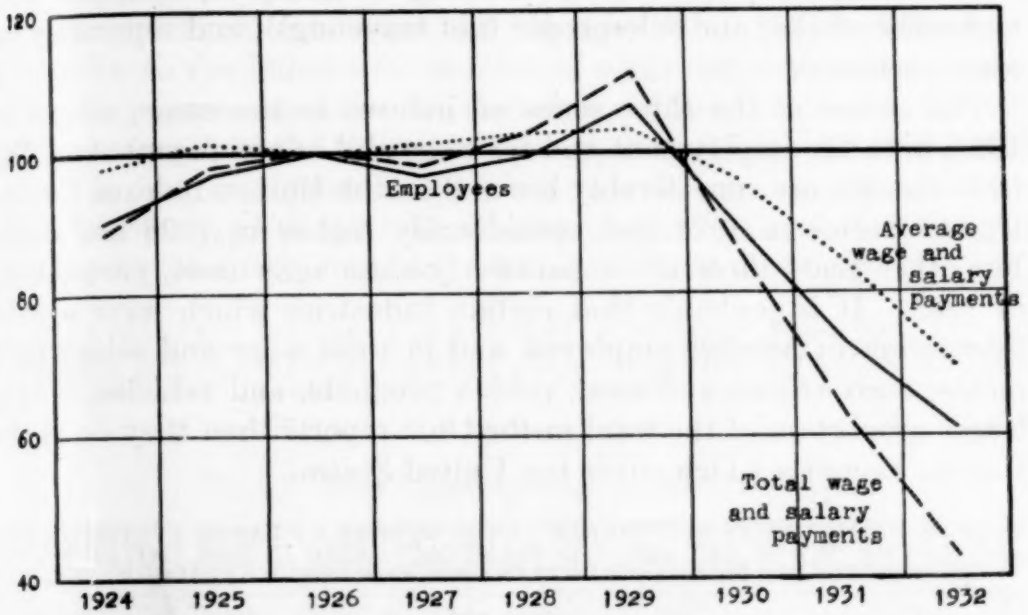


FIGURE 3.—GENERAL INDEXES FOR AVERAGE NUMBER EMPLOYED AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS IN MANUFACTURES, 1924–32 (1926=100)

These differences are found in each of the three items for which indexes were computed.

Chart 3 shows in graphic form general indexes for average number employed (all employees) and total and average wage and salary payments in manufactures.

TABLE 11.—GENERAL INDEXES FOR AVERAGE NUMBER EMPLOYEDAND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS IN MANUFACTURES IN OHIO FOR ALL EMPLOYEES AND FOR WAGE EARNERS, 1924–32

[1926=100]

Year	All employees			Wage earners		
	Employees (average)	Total wage and salary payments	Average wage and salary payments	Employees (average)	Total wage and salary payments	Average wage and salary payments
1924	90.4	89.0	98.4	90.3	89.1	98.7
1925	96.9	98.0	101.2	97.0	98.2	101.3
1926	100.0	100.0	100.0	100.0	100.0	100.0
1927	97.1	98.5	101.6	96.6	97.6	101.1
1928	99.7	103.0	103.3	99.6	102.8	103.3
1929	107.4	111.4	103.8	106.9	110.6	103.5
1930	89.6	86.2	96.3	87.9	82.8	94.3
1931	73.6	62.1	84.4	71.9	58.8	81.8
1932	61.4	43.0	70.0	59.5	39.4	66.3

Table 12 presents a comparison of the general indexes for average number employed and total wage and salary payments in manufactures in Ohio, computed from reports of the Ohio Division of Labor Statistics, with the general indexes of the United States Bureau of Labor Statistics for employment and pay rolls in manufacturing in the United States. Indexes computed from the Ohio reports are shown for all employees (wage earners; bookkeepers, stenographers, and office clerks; and salespeople (not traveling)), and separately for wage earners.

The course of the three series of indexes is the same, except in 1928, both for employment and for wage and salary payments. The Ohio indexes are considerably lower than the Bureau indexes for the United States in 1924 and considerably higher in 1928 and 1929. For other years there is comparatively close agreement, particularly in 1932. It is probable that certain industries which have a wide fluctuation in number employed and in total wage and salary payments, such as iron and steel, rubber products, and vehicles, form a larger proportion of the total in the Ohio reports than they do in the Bureau's reports which cover the United States.

TABLE 12.—COMPARISON OF INDEXES OF U.S. BUREAU OF LABOR STATISTICS FOR EMPLOYMENT AND PAY ROLLS IN MANUFACTURING IN THE UNITED STATES WITH INDEXES FOR MANUFACTURES IN OHIO, COMPUTED FROM OHIO REPORTS, 1924–32

[1926=100]

Year	Employees (average)			Wage and salary payments		
	U.S. Bureau of Labor Statistics	Ohio reports		U.S. Bureau of Labor Statistics	Ohio reports	
		All employees	Wage earners		All employees	Wage earners
1924	98.2	90.4	90.3	94.6	89.0	89.1
1925	99.2	96.9	97.0	97.7	98.0	98.2
1926	100.0	100.0	100.0	100.0	100.0	100.0
1927	96.4	97.1	96.6	96.5	98.5	97.6
1928	93.8	99.7	99.6	94.5	103.0	102.8
1929	97.5	107.4	106.9	100.5	111.4	110.6
1930	84.7	89.6	87.9	81.3	86.2	82.8
1931	72.2	73.6	71.9	61.5	62.1	58.8
1932	60.1	61.4	59.5	41.6	43.0	39.4

Table 13 shows general indexes for each of the 14 industry subgroups under manufactures. The indexes are confined to wage earners only, and cover average number employed, total wage and salary payments, and average wage and salary payments. The 14 industry subgroups are classified, upon the basis of a classification used by the United States Bureau of Labor Statistics, as manufactures of "durable" products and manufactures of "nondurable" products.

The index for average number of wage earners in 1932 stood below 50 for 4 of the 5 industry subgroups listed under "durable" products. The lowest index for that year in the 9 industry subgroups listed under "nondurable" products was 57.2 and none of the other 8 fell below 65.5. The indexes in the "durable" group generally rose higher in 1928 and 1929 than did those in the "nondurable" group.

The index for total wage and salary payments in 1932 stood below 33 for 4 of the 5 industry subgroups listed under "durable." The lowest index for that year in the "nondurable" group was 40.5. The indexes for total wage and salary payments generally rose higher in the "durable" group in 1928 and 1929 than did those in the "nondurable" group.

The index for average wage and salary payments do not disclose as great a difference between the "durable" and the "nondurable" groups as do the indexes for number of wage earners and total wage and salary payments to such employees. The lowest index in 1932 (58.5) is found in the "durable" group, but the second, third, and fourth lowest are found in the "nondurable" group. The highest index in that year in the "durable" group is 70.4 and the index for 5 of the 9 under "nondurable" was higher than that figure.

TABLE 13.—GENERAL INDEXES FOR AVERAGE NUMBER OF WAGE EARNERS EMPLOYED AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS TO WAGE EARNERS IN MANUFACTURES, BY INDUSTRY SUBGROUPS CLASSIFIED AS MANUFACTURES OF "DURABLE" AND OF "NONDURABLE" PRODUCTS, 1924–32

[1926=100.0]

Wage earners (average number)

Industry subgroup	1924	1925	1926	1927	1928	1929	1930	1931	1932
Manufactures of "durable" products:									
Iron and steel and their products	90.5	95.2	100.0	93.7	95.0	103.7	81.5	58.6	45.1
Lumber and its products	101.2	105.3	100.0	101.8	95.7	95.3	77.7	62.4	49.0
Metals and metal products, other than iron and steel	105.5	112.4	100.0	108.6	111.8	130.6	110.9	96.4	86.6
Stone, clay, and glass products	88.8	95.0	100.0	89.7	88.6	85.2	69.7	58.1	42.7
Vehicles	82.3	100.9	100.0	91.4	114.8	127.4	89.6	69.4	45.0
Manufactures of "nondurable" products:									
Chemicals and allied products	94.2	100.9	100.0	100.1	105.1	108.7	98.0	93.2	79.8
Food and kindred products	90.9	93.1	100.0	94.6	97.4	103.7	112.4	106.4	97.5
Leather and leather products	93.4	98.4	100.0	101.5	96.4	95.2	86.6	81.6	79.7
Liquors and beverages	99.5	105.6	100.0	95.7	89.8	89.7	85.1	78.1	67.6
Paper and printing	91.7	95.8	100.0	102.0	101.1	108.2	103.7	98.5	90.8
Rubber products	85.8	101.7	100.0	104.2	107.4	113.3	83.2	70.6	65.5
Textiles	92.0	95.2	100.0	96.4	94.9	99.0	88.5	78.6	72.7
Tobacco manufactures	114.4	96.5	100.0	96.0	91.0	80.7	74.5	65.4	57.2
Miscellaneous manufactures	80.2	88.7	100.0	99.4	106.9	120.6	100.1	81.8	67.2

Total wage and salary payments to wage earners

Manufactures of "durable" products:									
Iron and steel and their products	88.8	97.3	100.0	92.6	97.7	107.8	76.6	45.0	26.4
Lumber and its products	97.4	114.0	100.0	102.6	96.9	96.1	72.3	51.6	32.3
Metals and metal products, other than iron and steel	99.4	111.6	100.0	107.7	115.0	135.4	108.7	80.6	61.0
Stone, clay, and glass products	89.3	95.2	100.0	88.1	86.0	82.9	61.1	47.0	28.6
Vehicles	97.7	118.1	100.0	110.6	137.2	147.1	85.6	58.5	30.2
Manufactures of "nondurable" products:									
Chemicals and allied products	94.1	100.8	100.0	101.6	102.7	111.5	99.6	88.8	67.7
Food and kindred products	93.6	95.6	100.0	102.2	107.3	113.1	125.6	105.8	85.3
Leather and leather products	92.1	96.2	100.0	102.4	95.5	94.6	72.5	64.0	49.9
Liquors and beverages	103.9	110.1	100.0	98.9	93.8	93.2	87.6	76.4	56.8
Paper and printing	88.1	83.1	100.0	101.0	103.2	110.7	103.3	90.8	73.3
Rubber products	84.6	101.0	100.0	105.6	110.8	113.3	77.2	56.7	42.4
Textiles	88.5	94.1	100.0	94.1	90.9	93.9	78.1	63.0	47.4
Tobacco manufactures	88.3	96.0	100.0	92.2	85.8	74.3	65.2	54.7	40.5
Miscellaneous manufactures	73.9	83.7	100.0	97.1	103.4	117.1	90.6	68.9	44.5

TABLE 13.—GENERAL INDEXES FOR AVERAGE NUMBER OF WAGE EARNERS EMPLOYED AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS TO WAGE EARNERS IN MANUFACTURES, BY INDUSTRY SUBGROUPS CLASSIFIED AS MANUFACTURES OF "DURABLE" AND OF "NONDURABLE" PRODUCTS, 1924-32—Continued

Average wage and salary payments to wage earners

Industry subgroup	1924	1925	1926	1927	1928	1929	1930	1931	1932
Manufactures of "durable" products:									
Iron and steel and their products	98.1	102.1	100.0	98.8	102.8	104.0	94.0	76.8	58.5
Lumber and its products	96.3	108.3	100.0	100.8	101.2	100.8	93.1	82.8	65.9
Metals and metal products, other than iron and steel	94.2	99.3	100.0	99.2	102.9	103.8	98.0	83.6	70.4
Stone, clay, and glass products	100.6	100.3	100.0	98.2	97.0	97.3	87.6	80.9	67.0
Vehicles	118.8	117.0	100.0	121.0	119.5	115.4	95.5	84.2	67.0
Manufactures of "nondurable" products:									
Chemicals and chemical products	99.9	99.9	100.0	101.4	102.2	102.6	101.7	90.5	84.8
Food and kindred products	103.0	102.7	100.0	108.0	110.2	109.2	111.8	99.4	87.5
Leather and leather products	98.5	97.7	100.0	100.9	99.0	99.4	83.6	78.3	62.6
Liquors and beverages	104.5	104.3	100.0	103.3	104.4	103.9	102.9	97.8	84.0
Paper and printing	96.1	86.8	100.0	99.1	102.0	102.4	99.7	92.2	80.6
Rubber products	98.6	99.4	100.0	101.3	103.1	100.0	92.8	80.3	64.7
Textiles	96.2	99.0	100.0	97.7	95.8	95.0	88.3	80.1	65.3
Tobacco manufactures	77.1	99.4	100.0	96.0	94.3	92.1	87.4	83.5	70.7
Miscellaneous manufactures	92.2	94.4	100.0	97.7	96.7	97.1	90.5	84.2	66.2

Conclusion

For manufactures as a whole in Ohio, during the 17 years, 1916–32, the maximum employment was 857,366 in March 1920 and the minimum was 430,189 in August 1932. This was a variation from maximum of 427,177, or 49.8 percent. The highest average number employed during a year was 806,607 in 1929 and the lowest average was 461,183 in 1932, which was a reduction of 345,424, or 42.8 percent. The highest total wage and salary payment (omitting superintendents and managers) was $1,273,071,437 in 1920, and the lowest was $477,598,335 in 1932, which was a decrease of $795,473,102, or 62.5 percent. The highest average wage and salary payment was $1,602 in 1920, and the lowest was $783 in 1916. The second highest average was in 1929. The second lowest average was in 1917 and the third lowest in 1932.

Two major declines in manufactures occurred during the 17-year period. The first began in the latter part of 1920 and the second began for manufactures as a whole late in 1929, although marked declines in numbers employed and in total wage and salary payments in six subgroups began 2 or 3 years prior to 1929. The six were leather and leather products, lumber and its products, liquors and beverages, stone, clay, and glass products, textiles, and tobacco manufactures.

Table 14 shows for manufactures the decline in average number employed and in total and average wage and salary payments from 1920 to 1921 and from 1929 to 1932. In both periods wage earners show a greater decline in each of the three items than do either of the other two general occupation groups except in average employees in the later period.

The number employed (all three occupation groups) in manufactures declined 270,311, or 34 percent, between 1920 and 1921 and 345,424, or 42.8 percent, between 1929 and 1932.

Total wage and salary payments to the three general occupation groups in manufactures declined $595,207,988, or 46.8 percent, between 1920 and 1921 and $760,773,503, or 61.4 percent, between 1929 and 1932.

Average wage and salary payments in manufactures declined $309, or 19.3 percent, between 1920 and 1921 and $499, or 32.5 percent, between 1929 and 1932.

TABLE 14.—AMOUNT AND PERCENT OF DECREASE IN AVERAGE NUMBER EMPLOYED AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS IN MANUFACTURES IN OHIO, FROM 1920 TO 1921, AND FROM 1929 TO 1932, BY GENERAL OCCUPATION GROUPS

Period and general occupation group	Average number employed		Total wage and salary payments		Average wage and salary payments	
	Number decrease	Percent of decrease	Amount of decrease	Percent of decrease	Amount of decrease	Percent of decrease
1920–21						
All employees	270,311	34.0	$595,207,988	46.8	$309	19.3
Wage earners	255,187	35.6	566,694,430	49.6	346	21.7
Bookkeepers, stenographers, and office clerks	15,070	20.6	28,345,083	24.0	69	4.3
Salespeople (not traveling)	55	1.0	168,475	1.5	10	.5
1929–32						
All employees	345,424	42.8	760,773,503	61.4	499	32.5
Wage earners	318,318	44.3	692,609,824	64.4	539	36.0
Bookkeepers, stenographers, and office clerks	22,697	28.7	56,462,466	39.8	279	15.6
Salespeople (not traveling)	4,409	47.4	11,701,213	57.9	434	20.0

Table 15 shows for each industry subgroup the decline in average number employed and in total and average wage and salary payments from 1920 to 1921 and from 1929 to 1932.

Considering average number employed, the greatest decline in each period was in the manufacture of vehicles. The decline in that industry was 52.6 percent from 1920 to 1921 and 63.6 percent from 1929 to 1932. Other industry groups with a decline of more than 40 percent in each of the two periods were iron and steel and their products and rubber products. Leather and leather products show a smaller decline (2.9 percent) from 1920 to 1921 than any other subgroup, and food and kindred products show the lowest decline from 1929 to 1932 and the second lowest decline in the first period.

Considering total wage and salary payments the greatest decline in each period was also in the manufacture of vehicles. Other industry subgroups showing a decline of more than 40 percent in each period are iron and steel and their products, metal and metal products other than iron and steel, rubber products, and miscellaneous

manufactures. Additional industries showing a decline of more than 40 percent from 1929 to 1932 are leather and leather products, lumber and its products, stone, clay, and glass products, textiles, and tobacco manufactures.

The average wage and salary payments decline more than 25 percent in two industry subgroups—iron and steel and their products and tobacco manufactures—from 1920 to 1921. The decline was more than 25 percent in 9 of the 14 industry subgroups during the period from 1929 to 1932, the greatest decline being in iron and steel and their products with vehicles second in order. The least decline from 1929 to 1932 was in chemicals and allied products.

TABLE 15.—AMOUNT AND PERCENT OF DECREASE IN AVERAGE NUMBER EMPLOYED AND TOTAL AND AVERAGE WAGE AND SALARY PAYMENTS IN EACH INDUSTRY SUBGROUP IN MANUFACTURES FROM 1920 TO 1921 AND FROM 1929 TO 1932

Period and industry subgroup	All employees (average number)		Total wage and salary payments		Average wage and salary payments	
	Number (decrease)	Percent of decrease	Amount of decrease	Percent of decrease	Amount of decrease	Percent of decrease
1920–21						
Chemicals and allied products	5,483	22.3	$10,863,462	30.1	$146	9.9
Food and kindred products	2,559	7.1	5,406,153	11.3	60	4.5
Iron and steel and their products	122,750	41.9	311,003,309	57.1	487	26.2
Leather and leather products	511	2.9	1,154,459	5.8	34	3.0
Liquors and beverages	1,071	25.3	2,642,572	36.0	249	14.4
Lumber and its products	6,072	21.1	9,006,048	24.2	52	4.0
Metals and metal products other than iron and steel	12,010	31.4	22,309,347	41.0	200	14.1
Paper and printing	4,713	11.4	10,233,937	17.5	98	7.0
Rubber products	34,554	48.4	69,819,458	55.5	242	13.7
Stone, clay, and glass products	8,245	19.7	21,047,150	34.0	263	17.7
Textiles	7,228	16.3	7,787,920	16.3	[1]1	[1]1
Tobacco manufactures	2,363	14.8	5,706,032	37.3	252	26.3
Vehicles	40,326	52.6	78,904,499	60.8	292	17.2
Miscellaneous manufactures	22,425	37.2	39,323,621	45.5	188	13.1
Total	270,311	34.0	595,207,988	46.8	309	19.3
1929–32						
Chemicals and allied products	6,841	24.6	14,062,217	35.2	213	14.0
Food and kindred products	5,842	13.9	18,715,432	32.0	293	21.1
Iron and steel and their products	148,962	54.7	344,231,688	72.9	696	40.1
Leather and leather products	2,856	17.4	8,579,315	46.5	398	35.5
Liquors and beverages	557	24.8	1,345,914	39.3	292	19.1
Lumber and its products	12,607	47.4	22,658,765	64.2	424	31.9
Metals and metal products, other than iron and steel	13,507	31.6	32,457,865	51.5	429	29.1
Paper and printing	8,048	14.8	26,067,468	31.0	295	19.1
Rubber products	28,510	41.0	66,306,184	59.2	495	30.7
Stone, clay, and glass products	21,249	49.0	37,545,622	64.2	402	29.8
Textiles	12,391	26.7	23,925,705	48.5	316	29.8
Tobacco manufactures	2,644	29.1	2,770,205	44.9	151	22.3
Vehicles	49,921	63.6	98,395,656	77.3	614	37.9
Miscellaneous manufactures	31,900	41.7	63,711,467	57.8	398	27.6
Total	345,424	42.8	760,773,503	61.4	[2]499	[2]32.5

[1] Increase.

[2] Owing to a clerical error, the article on "Average Wage and Salary Payments in Ohio, 1918 to 1932," in the Monthly Labor Review for January 1934, shows the decrease $461, or 30 percent.

Wages and Hours of Labor in Air Transportation, 1933

THE Bureau of Labor Statistics and the Federal Coordinator of Transportation cooperated in a study of hours and earnings in 1933 of commercial air transportation employees in the United States. A summary of this study, together with comparative figures in 1931, is presented in this article. The study covered pilots and copilots operating heavier-than-air machines on scheduled mail and passenger routes, the ground personnel used in the operation and repair of such machines, and certain other employees. It covered approximately 96 percent of such workers, 3,609 males and 207 females employed by 15 transportation companies serving 156 cities in 43 States and the District of Columbia. Employees engaged in the operation of machines for sight-seeing, crop dusting, mapping and surveying, and flying-instruction activities were not included.

For all companies the full-time flight-hours per month of pilots were 110.0 in 1931, the maximum fixed by the Department of Commerce, but averaged 109.0 in 1933. Actual hours flown averaged 80.4 in 1931 and 85.3 in 1933. The 1931 figure is for the month of October, however, while the average for 1933 is for July, a month in that part of the year known as "better flying weather", which might account in part for the increase in hours flown. Average mileage flown per pilot per month in 1933 was 9,815; the mileage flown was not obtained in 1931.

The average actual monthly earnings of pilots and copilots increased from $569.49 and $227.89, respectively, in 1931 to $628.23 and $231.13 in 1933. Those of all other employees combined decreased from $31.66 per week in 1931 to $30.25 per week in 1933.

Average hours and earnings in 1931 and 1933 are shown by districts in table 1 for pilots, in table 2 for copilots, and in table 3 for each of the other important occupations in commercial transportation and also for a group designated as "other employees", including occupations having too few employees to warrant separate occupational tabulation. The wage figures are shown by districts, instead of by States or cities, in order to avoid showing averages for a single company and thus possibly revealing its identity. The States included in each of the geographic districts shown are as follows:

North Atlantic.—Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

East North Central.—Ohio, Indiana, Illinois, Michigan, and Wisconsin.

West North Central.—Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

South Atlantic.—Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Georgia, and Florida.

South Central.—Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

Western.—Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, and California.

It was found necessary to obtain wage figures for the flight personnel (pilots and copilots) for an entire month, a shorter period being impractical as so many things might interfere with the maintaining of flight schedules. Wage figures for the ground personnel of each company were collected for a pay period in July and then converted to a weekly basis, in order that the hours and earnings of such employees might, as nearly as possible, be comparable with those of other industries for which figures are published by the Bureau.

Each transport company maintains at terminal and intermediate airports a force of employees ranging from a few operation mechanics and radio operators and repairers to a large organization including all the occupations for which wage figures are shown in this report. As many as five or six companies may each maintain a force of employees at large terminal airports; in such cases, each force was counted a "local unit."

Hours and Earnings of Pilots, 1931 and 1933, by Districts

PILOTS must possess a high degree of skill and resourcefulness and considerable intelligence and experience. Each one must have a scheduled air transport rating, issued by the United States Department of Commerce. From the time he steps into the plane until he leaves it, the pilot has complete command. He operates the controls of the plane at all times during its flight, unless he has a copilot to relieve him; the pilots on small planes, however, are not accompanied by copilots. On planes equipped with radio, the pilot, when unaccompanied by a copilot, must have a radio operator's license in order to maintain communication with the ground stations and receive weather reports.

Maximum full-time flight hours of pilots are regulated by the United States Department of Commerce. A pilot employed in interstate passenger air transport service shall not be on flight duty more than 110 hours in any 1 month, nor 30 hours in any 7-day period, nor 8 hours in any 24-hour period. He must also be granted a rest period of at least 24 consecutive hours within each 7-day period. Certain latitude, however, is allowed when necessary for reasonable schedules.

The hours actually flown in 1931, averaging 80.4, ranged in the various districts from 76.2 in the western district to 86.7 in the south central, and in 1933, with an average of 85.3, the range was from 78.4 in the western district to 92.6 in the south Atlantic. The proportion, for all districts, of full-time actually flown, responding to changes both in maximum and actual time, showed a change from 73.1 percent in 1931 to 78.3 percent in 1933.

Mileage data, with an average in 1933 of 9,815 miles flown per month per pilot, ranged from 9,098 in the south Atlantic district to

10,394 miles in the north Atlantic. Average earnings per mile varied from 5.9 cents in the south central district to 6.7 cents in both the north Atlantic and western districts with an average for all districts of 6.4 cents.

Average actual earnings of pilots in July 1933 ranged from $570.55 in the south central district to $695.24 in the north Atlantic, with an average for all districts combined of $628.23. This is an increase of 10.3 percent over the October 1931 figures, when the average for all districts was $569.49, ranging from $482.45 for the south central district to $617.84 for the south Atlantic.

In the past 2 years, the industry has been gradually changing from the mile as a basic unit of pay to the flight-hour as a standardized basis. An example of the effect of the change is shown by the figures for the south Atlantic district, where the average actual hours flown were 7.9 percent more in 1933 than in 1931, while the average actual earnings were 7.1 percent less in 1933 than in 1931.

Average earnings per flight-hour ranged in 1931 from $5.565 for the south central district to $8.066 for the western; for all districts combined they were $7.084. In 1933, these averages ranged from $6.201 for the south Atlantic district to $8.385 for the western, with an average of $7.361 for all districts combined.

At the time of the survey the pilots in a small number of companies were paid a monthly salary regardless of the number of hours flown during the month. In the majority of companies, however, the pilots received a basic monthly salary plus a specified rate per flight-hour or per mile flown. The mileage or hourly rate for night flying was generally higher than that for day flying. The rates also varied according to the terrain of the route and the speed of the planes. Actual figures showing monthly salaries and mileage rates separately could not be published, however, without the possibility of revealing the identity of some of the companies.

Table 1a shows for all districts combined the averages in 1933 of those companies which are subsidized (under contract to carry United States mail) and those which are not. The nonsubsidized companies depended entirely upon the passengers and express carried for their operating revenue and did not pay their pilots so high a rate as was paid by the subsidized companies.

TABLE 1.—FULL-TIME AND ACTUAL FLIGHT-HOURS OF PILOTS, MILEAGE FLOWN, AND EARNINGS PER FLIGHT-HOUR, PER MILE, AND PER MONTH, BY DISTRICT

Fifteen Commercial Air Transport Companies, United States, October 1931 and July 1933

[All averages are weighted by number of local units]

District	Year	Number of local units	Number of pilots	Average hours		Average distance, mileage in 1 month	Percent of actual to full time	Average earnings		
				Full-time flight-hours	Actually flown in 1 month			Per flight-hour	Per mile	Actual in 1 month
North Atlantic	1931	12	46	110.0	84.1		76.5	$7.284		$612.87
	1933	7	52	110.0	91.9	10,394	83.5	7.563	$0.067	695.24
East North Central	1931	24	123	110.0	79.4		72.2	6.929		550.22
	1933	16	105	110.0	84.5	9,777	76.8	7.641	.066	645.70
West North Central	1931	12	81	110.0	78.4		71.3	6.906		541.47
	1933	11	73	110.0	86.0	9,854	78.2	6.820	.060	586.66
South Atlantic	1931	10	45	110.0	85.8		78.0	7.199		617.84
	1933	9	40	110.0	92.6	9,098	84.2	6.201	.063	574.27
South Central	1931	16	53	110.0	86.7		78.8	5.565		482.45
	1933	8	62	107.5	89.3	9,746	83.1	6.388	.059	570.55
Western	1931	24	112	110.0	76.2		69.3	8.066		614.86
	1933	19	120	107.3	78.4	9,849	73.0	8.385	.067	657.00
Total	1931	98	460	110.0	80.4		73.1	7.084		569.49
	1933	70	452	109.0	85.3	9,815	78.3	7.361	.064	628.23

TABLE 1a.—FULL-TIME AND ACTUAL FLIGHT-HOURS OF PILOTS, MILEAGE FLOWN, AND EARNINGS PER FLIGHT-HOUR, PER MILE AND PER MONTH, BY KIND OF COMPANY

Kind of company	Year	Number of local units	Number of pilots	Average hours		Average distance, mileage in 1 month	Percent of actual to full time	Average earnings		
				Full-time flight-hours	Actually flown in 1 month			Per flight-hour	Per mile	Actual in 1 month
Subsidized companies	1933	64	434	109.4	85.7	9,818	78.3	$7.517	$0.066	$644.36
Nonsubsidized companies [1]	1933	6	[1] 18	98.1	76.4	9,739	77.9	3.134	.025	239.45
All companies	1933	70	452	109.0	85.3	9,815	78.3	7.361	.064	628.23

[1] 1 large and 5 small companies not included in these averages.

Days, Hours, and Earnings of Copilots, 1931 and 1933, by Districts

COPILOTS usually hold a United States Department of Commerce transport license and are qualified to operate the controls of the plane when called on to relieve the pilot. On planes equipped with radio they must also have a radio operator's license permitting them to maintain communication by radio with ground stations. On long flights, when a stewardess or hostess is not part of the crew, they often act as stewards, serving meals en route and providing for the comfort of the passengers.

Table 2 shows, for the copilots covered in each geographic district and in all districts combined, average days and hours per month and average earnings per month and per hour for the years 1931 and 1933. Average earnings are shown for their work as copilots, as acting

pilots, and in both capacities. Figures for copilots are not shown for the south Atlantic district in 1931, due to the fact that flying in this district was from base ports in adjacent districts where data for them are shown.

Average full-time days in 1 month in 1931 ranged by districts from 19.8 for the north Atlantic to 22.8 for the western, with an all-district average of 21.2. In 1933, this range was from 19.3 for the western district to 22.5 for the north Atlantic; for all districts combined the average was 20.0. Full-time hours of copilots vary with the operating schedule of the particular trip each individual flies regularly. The range by districts in 1931 was from 158.4 for the north Atlantic district to 182.7 for the western, and the average for all districts was 170 hours. In 1933, the range was from 114.1 for the western district to 159.3 for the north Atlantic. The average for all districts combined was 124.9. More copilots were employed in 1933 than in 1931, thus allowing more relief to the individual and reducing the average full-time hours.

Since it was impossible to get actual flight-hours of all copilots except when they were on duty as pilots, data on this point and on actual earnings per flight-hour cannot be shown for them.

With few exceptions, copilots are paid a straight monthly salary, regardless of hours or mileage flown in the month. Their only additional earnings are for work as acting pilot. For work as copilot only, the average full-time actual earnings in 1 month in 1931 ranged from $198.16 for the west north central district to $238.21 for the western, and for all districts were $218.26. The average earnings per hour ranged from $1.162 for the west north central district to $1.422 for the north Atlantic, and for all districts were $1.284. In 1933, these earnings ranged from $193.42 for the west north central district to $242.33 for the north Atlantic, with earnings for all districts combined of $226.81. Average earnings per hour ranged from $1.490 for the west north central district to $2.060 for the western, with an average for all districts of $1.817.

Table 2 shows that in the month covered by the study in 1933, 12 copilots also acted part time as pilots. Their earnings in this capacity, averaging $75.57 each for the month, were sufficient to raise earnings per month for the whole group of copilots from an average of $226.81 to $231.13, and earnings per hour from $1.817 to $1.851.

TABLE 2.—DAYS AND HOURS OF COPILOTS AND EARNINGS FOR REGULAR AND ADDITIONAL WORK, BY DISTRICTS

Fifteen Commercial Air Transport Companies, October 1931 and July 1933

District	Year	Number of local units	Number of copilots	Average full time in 1 month		Earnings for copilot work only		Additional earnings as acting pilot		Total earnings	
				Days	Hours	Average in 1 month	Average per hour [1]	Number of copilots	Average in 1 month	Average in 1 month	Average per hour
North Atlantic	1931	6	20	19.8	158.4	$225.21	$1.422	4	$154.00	$256.01	$1.616
	1933	3	19	22.5	159.3	242.33	1.521	3	132.88	263.31	1.653
East North Central	1931	10	48	20.3	162.0	208.21	1.285	3	33.27	210.29	1.298
	1933	11	70	20.6	128.3	228.77	1.783	1	71.20	229.78	1.790
West North Central	1931	4	19	21.3	170.5	198.16	1.162			198.16	1.162
	1933	3	28	19.8	129.8	193.42	1.490	2	60.21	197.72	1.523
South Atlantic	1933	1	(2)	(2)	(2)	(2)	(2)			(2)	(2)
South Central	1931	5	13	22.4	179.1	215.77	1.205			215.77	1.205
	1933	2	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Western	1931	9	38	22.8	182.7	238.21	1.304	5	122.49	254.32	1.392
	1933	9	71	19.3	114.1	234.92	2.060	5	46.43	238.19	2.088
Total	1931	34	138	21.2	170.0	218.26	1.284	12	110.69	227.89	1.341
	1933	29	210	20.0	124.9	226.81	1.817	12	75.57	231.13	1.851

[1] Based on average full-time hours and earnings in 1 month.
[2] Data included in totals but not given separately to avoid identification.

Days, Hours, and Earnings of Stewardesses or Hostesses, 1933

IN 1933, 3 companies employed 108 stewardesses or hostesses based at 10 local units throughout the country. Detailed data for this occupation may not be shown by district, as it might reveal the identity of the particular company or companies. Data for all districts combined are as follows: The 108 employees worked an average of 20.7 days, with average full-time hours of 126.8. Average earnings per month were $134.12 and average earnings per hour $1.058.

Days, Hours, and Earnings, 1931 and 1933, of Other Employees

TABLE 3 shows average days, hours, and earnings for each district and for all districts combined for males in each of the occupations and in all occupations combined in commercial air transportation, except pilots and copilots, for the years 1931 and 1933. Females were employed as traffic agents, clerks, stenographers, dispatchers, and the groups of other employees, skilled and unskilled; because of the small number in any one of the occupations in the industry, no separate occupational classification is given for them, but an average is shown for all occupations combined.

Approximately 15 percent of the employees in this table were paid hourly rates for the hours actually worked during the pay period covered by the study and 85 percent were paid weekly, monthly, or yearly salaries based on full time, regardless of the number of hours actually worked during the period. The salary of each employee whose rate was for a month or year has been converted to a weekly

rate, which in turn was divided by the number of full-time hours to secure average earnings per hour. Therefore, the sixth column of table 3 is headed "Average credited hours per week" instead of "Average hours actually worked in 1 week" as in wage reports for other industries.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS, AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED

Fifteen Commercial Air Transport Companies, United States, October 1931 and July 1933

For men: Occupation and district. For men and women: District (all occupations combined) [1]	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
Agents, traffic, male:										
North Atlantic	1931	13	21	6.0	48.0	48.0	100.0	$0.576	$27.65	$27.65
	1933	12	31	6.0	48.2	48.2	100.0	.592	28.49	28.49
East North Central	1931	22	43	6.0	48.0	48.0	100.0	.649	31.17	31.17
	1933	9	25	6.4	50.9	50.9	100.0	.596	30.33	30.33
West North Central	1931	13	16	6.1	47.3	47.3	100.0	.701	33.12	33.12
	1933	10	19	6.0	47.4	46.9	99.1	.545	25.82	25.57
South Atlantic	1931	17	23	6.0	48.1	48.1	100.0	.555	26.69	26.69
	1933	8	14	6.0	49.3	49.3	100.0	.507	24.97	24.97
South Central	1931	22	41	6.0	48.2	48.2	100.0	.603	29.04	29.04
	1933	8	10	6.1	49.4	49.4	100.0	.447	22.06	22.06
Western	1931	16	31	5.9	48.2	47.2	97.9	.689	33.20	32.49
	1933	12	25	6.1	47.8	47.8	100.0	.625	29.89	29.89
Total	1931	103	175	6.0	48.0	47.8	99.6	.629	30.17	30.07
	1933	59	124	6.1	48.8	48.7	99.9	.571	27.86	27.78
Chauffeurs, male:										
North Atlantic	1931	1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
	1933	2	3	6.0	48.7	48.7	100.0	.349	16.96	16.96
East North Central	1931	7	20	6.1	48.2	49.4	102.5	.528	25.45	26.09
	1933	6	21	6.0	47.8	47.5	99.5	.535	25.55	25.42
West North Central	1931	3	6	5.8	48.0	46.7	97.3	.500	23.98	23.31
	1933	2	4	6.0	47.0	47.0	100.0	.509	23.93	23.93
South Atlantic	1931	1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
	1933	2	3	6.0	54.0	54.0	100.0	.185	10.00	10.00
South Central	1931	2	2	6.5	52.0	52.0	100.0	.333	17.31	17.31
	1933	5	8	6.0	48.4	48.4	100.0	.514	24.86	24.86
Western	1931	3	5	6.0	48.0	48.0	100.0	.620	29.77	29.77
	1933	1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
Total	1931	17	41	6.0	48.3	48.7	100.8	.558	26.93	27.14
	1933	18	40	6.0	48.4	48.2	99.7	.486	23.52	23.45
Clerks, stenographers, male:										
North Atlantic	1931	1	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
	1933	12	38	5.9	48.6	48.3	99.4	.543	26.39	26.23
East North Central	1931	11	23	6.0	48.0	48.0	100.0	.478	22.96	22.96
	1933	12	57	6.2	48.6	49.8	102.3	.614	29.84	30.54
West North Central	1931	8	16	6.0	48.0	48.0	100.0	.534	25.65	25.65
	1933	5	14	6.0	48.6	48.6	100.0	.550	26.72	26.72
South Atlantic	1931	6	24	6.0	48.0	48.0	100.0	.620	29.74	29.74
	1933	3	12	6.0	48.0	48.0	100.0	.531	25.48	25.48
South Central	1931	8	25	6.0	48.7	48.7	100.0	.487	23.73	23.73
	1933	8	24	6.0	49.2	49.2	100.0	.527	25.95	25.95
Western	1931	9	18	6.0	48.0	48.0	100.0	.661	31.74	31.74
	1933	11	25	6.0	47.0	47.0	100.0	.633	29.75	29.75
Total	1931	43	107	6.0	48.2	48.2	100.0	.551	26.54	26.54
	1933	51	170	6.1	48.4	48.7	100.6	.577	27.93	28.14

[1] Definitions of occupations may be found in U.S. Bureau of Labor Statistics Bul. No. 575, pp. 34-41
[2] Data included in total but not given separately, to avoid identification.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS, AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED—Continued

For men: Occupation and district. For men and women: District (all occupations combined)	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
Crew chiefs, male:										
North Atlantic	1931	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
East North Central	1931	9	25	6.1	49.2	51.7	105.1	$0.838	$41.22	$43.31
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
West North Central	1931	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Atlantic	1931	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Central	1931	2	2	6.0	48.0	48.0	100.0	.837	40.19	40.19
Total	1931	14	44	6.0	48.7	50.1	103.0	.902	43.91	45.17
	1933	3	15	6.1	49.2	50.5	102.7	.780	38.38	29.42
Dispatchers, male:										
North Atlantic	1931	7	23	5.6	48.8	48.8	100.0	.559	27.26	27.26
	1933	8	20	6.0	52.8	52.8	100.0	.506	26.71	26.71
East North Central	1931	11	27	6.0	48.0	48.0	100.0	.608	29.17	29.17
	1933	15	29	6.1	50.9	50.9	100.0	.560	28.51	28.51
West North Central	1931	4	9	6.0	48.0	48.0	100.0	.663	31.82	31.82
	1933	6	13	6.2	48.5	48.5	100.0	.561	27.19	27.19
South Atlantic	1931	11	26	5.8	48.3	48.3	100.0	.549	26.54	26.54
	1933	13	45	6.0	53.3	53.3	100.0	.426	22.71	22.71
South Central	1931	10	17	6.0	45.9	45.9	100.0	.520	23.86	23.86
	1933	16	29	6.0	51.4	51.4	100.0	.490	25.20	25.20
Western	1931	9	16	6.0	48.0	48.0	100.0	.718	34.46	34.46
	1933	7	10	6.1	50.0	50.0	100.0	.511	25.56	25.56
Total	1931	52	118	5.9	47.9	47.9	100.0	.592	28.37	28.37
	1933	65	146	6.1	51.7	51.7	100.0	.493	25.50	25.50
Inspectors, male:										
North Atlantic	1931	3	5	6.0	48.0	48.0	100.0	1.038	49.84	49.84
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
East North Central	1931	3	9	6.2	47.6	50.6	106.3	.863	41.07	43.63
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
West North Central	1931	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Atlantic	1931	2	2	6.0	48.0	48.0	100.0	1.022	49.04	49.04
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Central	1931	2	3	6.0	49.7	49.7	100.0	.953	47.31	47.31
	1933	2	4	6.0	51.8	51.8	100.0	.819	42.40	42.40
Western	1931	2	3	6.0	48.0	49.7	103.5	1.031	49.50	51.22
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	1931	13	25	6.1	48.0	49.6	103.0	.945	45.37	46.87
	1933	7	23	6.0	50.8	50.8	100.0	.719	36.51	36.51
Janitors, male:										
North Atlantic	1931	4	7	6.0	51.4	51.4	100.0	.396	20.36	20.36
	1933	3	9	6.0	45.9	45.9	100.0	.377	17.28	17.28
East North Central	1931	9	28	6.3	54.7	55.5	101.5	.328	17.93	18.19
	1933	5	12	6.3	49.7	49.5	99.6	.462	22.94	22.83
West North Central	1931	4	6	6.2	60.0	58.7	97.8	.402	24.11	23.58
	1933	4	9	6.0	47.4	47.4	100.0	.344	16.32	16.32
South Atlantic	1931	3	7	6.0	51.4	51.4	100.0	.272	14.01	14.01
	1933	3	8	6.0	54.0	54.0	100.0	.169	9.14	9.14
South Central	1931	5	9	6.2	51.1	51.1	100.0	.282	14.39	14.39
	1933	2	3	6.0	52.0	52.0	100.0	.302	15.69	15.69
Western	1931	5	16	6.1	49.7	49.7	100.0	.485	24.11	24.11
	1933	8	11	6.1	49.0	49.0	100.0	.409	20.06	20.06
Total	1931	30	73	6.2	53.0	53.2	100.4	.362	19.21	19.27
	1933	25	52	6.1	49.3	49.2	99.9	.358	17.65	17.64

[1] Data included in total but not given separately, to avoid identification.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED—Continued

For men: Occupation and district. For men and women: District (all occupations combined)	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
Machinists and toolmakers, male:										
East North Central	1931	5	10	6.2	46.4	58.3	125.6	$0.756	$35.09	$44.12
	1933	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
West North Central	1931	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
	1933	3	7	6.1	48.4	50.2	103.6	.641	31.02	32.17
South Central	1931	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
	1933	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Western	1931	2	5	6.0	48.0	48.1	100.2	.721	34.61	34.68
	1933	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Total	1931	9	19	6.1	47.2	53.5	113.3	.754	35.58	40.36
	1933	6	14	6.1	49.1	49.8	101.4	.693	34.03	34.49
Mechanics, airplane, licensed, male:										
North Atlantic	1933	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
East North Central	1931	5	25	6.1	46.3	51.0	112.3	.766	35.45	39.81
	1933	4	46	6.2	48.6	52.5	107.9	.707	34.37	37.11
West North Central	1931	3	32	5.3	48.0	46.8	97.5	.676	32.44	31.67
	1933	4	34	5.8	48.8	48.5	99.4	.657	32.06	31.87
South Atlantic	1931	3	16	6.2	48.0	53.9	112.3	.749	35.93	40.33
	1933	2	9	6.0	54.0	54.0	100.0	.589	31.80	31.80
South Central	1931	4	7	6.0	48.9	50.5	103.3	.650	31.79	32.84
	1933	2	13	6.0	51.5	52.1	101.2	.655	33.71	34.08
Western	1931	8	82	6.1	48.0	53.1	110.6	.748	35.91	39.75
	1933	5	20	5.9	48.0	47.8	99.6	.772	37.07	36.94
Total	1931	23	162	6.0	47.8	51.7	108.2	.734	35.08	37.92
	1933	18	123	6.0	49.3	50.7	102.8	.688	33.92	34.83
Mechanics, engine, licensed, male:										
North Atlantic	1931	4	9	6.0	48.0	48.0	100.0	.791	37.98	37.98
	1933	2	2	6.0	51.0	51.0	100.0	.668	34.04	34.04
East North Central	1931	10	46	6.1	47.3	52.0	109.9	.704	33.32	36.64
	1933	5	58	6.2	48.6	51.3	105.5	.689	33.49	35.34
West North Central	1931	3	27	5.7	48.0	47.4	98.8	.717	34.43	34.02
	1933	4	38	5.8	48.3	47.3	97.9	.685	33.10	32.39
South Atlantic	1931	3	20	6.0	48.0	48.9	101.9	.852	40.87	41.64
	1933	3	14	6.0	54.0	54.0	100.0	.565	30.50	30.50
South Central	1931	3	16	5.8	50.1	48.6	97.0	.722	36.18	35.10
	1933	2	17	5.9	51.2	54.6	106.7	.698	35.75	38.14
Western	1931	8	32	5.9	48.0	49.5	103.1	.747	35.85	37.00
	1933	7	23	5.9	48.0	47.2	98.3	.725	34.82	34.23
Total	1931	31	150	5.9	48.0	49.6	103.3	.742	35.61	36.83
	1933	23	152	6.0	49.3	50.3	102.1	.682	33.62	34.28
Mechanics, airplane and engine, licensed, male:										
North Atlantic	1931	12	72	6.0	48.0	49.1	102.3	.783	37.60	38.48
	1933	10	69	6.0	50.2	50.2	100.0	.722	36.27	36.27
East North Central	1931	27	132	6.1	48.6	51.7	106.4	.711	34.54	36.78
	1933	15	131	6.3	50.3	51.3	102.0	.704	35.39	36.09
West North Central	1931	18	67	6.0	48.1	48.4	100.6	.700	33.66	33.87
	1933	16	58	6.0	48.1	47.4	98.4	.683	32.85	32.35
South Atlantic	1931	10	59	6.0	48.0	48.1	100.2	.806	38.70	38.78
	1933	7	43	6.0	53.5	53.5	100.0	.615	32.91	32.91
South Central	1931	19	99	6.0	49.5	49.7	100.4	.721	35.67	35.85
	1933	19	69	6.2	51.1	52.4	102.5	.642	32.81	33.66
Western	1931	29	159	6.0	48.0	48.8	101.7	.778	37.33	37.92
	1933	30	139	6.1	48.5	48.8	100.6	.749	36.32	36.51
Total	1931	115	588	6.0	48.4	49.5	102.3	.747	36.16	37.01
	1933	97	509	6.1	49.9	50.4	100.9	.699	34.88	35.21

[2] Data included in total but not given separately, to avoid identification.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS, AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED—Continued

For men: Occupation and district. For men and women: District (all occupations combined)	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
Mechanics, airplane or engine, not licensed, male:										
North Atlantic	1931	5	9	6.2	48.0	49.4	102.9	$0.653	$31.33	$32.27
	1933	4	15	6.0	51.6	51.6	100.0	.531	27.40	27.40
East North Central	1931	7	51	6.0	47.1	53.3	113.2	.641	30.19	34.18
	1933	11	75	5.9	49.2	47.8	97.3	.572	28.16	27.39
West North Central	1931	3	31	5.0	48.0	44.8	93.3	.573	27.50	25.68
	1933	11	118	5.8	48.9	46.7	95.5	.562	27.49	26.24
South Atlantic	1931	5	39	6.0	48.0	48.8	101.7	.647	31.05	31.59
	1933	4	54	6.0	54.0	54.0	100.0	.550	29.70	29.70
South Central	1931	2	24	5.9	49.1	49.2	100.2	.721	35.41	35.52
	1933	3	23	6.0	51.0	53.6	105.0	.562	28.66	30.10
Western	1931	6	16	6.0	48.0	49.0	102.1	.615	29.51	30.10
	1933	9	47	6.0	48.3	47.9	99.2	.554	26.73	26.49
Total	1931	28	170	5.8	47.9	50.0	104.4	.641	30.68	31.74
	1933	42	332	5.9	50.0	49.0	98.1	.560	28.00	27.42
Mechanics, chief, male:										
North Atlantic	1931	7	7	6.0	48.0	49.6	103.3	1.077	51.67	53.36
	1933	4	4	6.0	51.8	51.8	100.0	.894	46.27	46.27
East North Central	1931	14	25	6.0	47.3	48.1	101.7	1.037	49.06	49.91
	1933	9	19	6.1	48.4	48.4	100.0	1.075	51.98	51.98
West North Central	1931	8	17	6.1	48.0	49.5	103.1	1.088	52.23	53.84
	1933	11	21	6.0	47.9	47.9	100.0	.941	45.01	45.01
South Atlantic	1931	6	10	6.0	48.0	48.0	100.0	1.197	57.46	57.46
	1933	5	12	6.0	54.0	54.0	100.0	.963	52.02	52.02
South Central	1931	10	17	6.0	48.7	48.7	100.0	1.016	49.52	49.52
	1933	4	4	6.0	51.8	51.8	100.0	.861	44.58	44.58
Western	1931	25	43	6.0	48.2	48.3	100.2	1.069	51.53	51.59
	1933	12	27	6.1	48.3	49.3	102.0	1.020	49.27	50.26
Total	1931	70	119	6.0	48.0	48.5	101.0	1.069	51.30	51.86
	1933	45	87	6.1	49.3	49.6	100.6	.991	48.86	49.17
Mechanics' helpers, licensed, male:										
North Atlantic	1931	2	3	6.3	48.0	50.7	105.6	.603	28.96	30.57
	1933	2	4	6.0	48.0	48.0	100.0	.489	23.48	23.48
East North Central	1931	15	34	6.1	47.3	50.1	105.9	.534	25.28	26.76
	1933	4	7	6.0	51.4	51.1	99.4	.446	22.92	22.81
West North Central	1931	6	8	6.3	47.3	49.1	103.8	.593	28.06	29.12
	1933	5	7	6.1	48.3	49.4	102.3	.434	20.97	21.45
South Atlantic	1931	3	6	6.0	48.0	48.0	100.0	.529	25.39	25.39
	1933	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Central	1931	3	4	6.0	50.5	50.2	99.4	.570	28.76	28.57
Western	1931	5	5	6.0	48.0	48.0	100.0	.555	26.63	26.63
	1933	7	28	6.0	48.0	48.0	100.0	.579	27.80	27.80
Total	1931	33	60	6.1	47.7	49.6	104.0	.549	26.20	27.24
	1933	19	49	6.0	48.9	49.0	100.2	.523	25.57	25.63
Mechanics' helpers, not licensed, male:										
North Atlantic	1931	7	28	6.1	48.0	49.6	103.3	.483	23.19	23.96
	1933	7	30	6.0	51.8	51.8	100.0	.394	20.41	20.41
East North Central	1931	17	72	6.0	49.7	51.8	104.2	.384	19.07	19.88
	1933	8	29	6.0	50.8	51.3	101.0	.492	24.97	25.21
West North Central	1931	11	51	6.0	47.9	48.1	100.4	.420	20.12	20.21
	1933	8	65	5.8	49.0	46.0	94.0	.411	20.14	18.92

[1] Data included in total but not given separately, to avoid identification.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS, AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED—Continued

For men: Occupation and district. For men and women: District (all occupations combined)	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
Mechanics' helpers, not licensed, male—Continued.										
South Atlantic	1931	10	57	6.1	48.0	51.1	106.5	$0.441	$21.19	$22.55
	1933	5	29	6.0	53.8	53.8	100.0	.305	16.42	16.42
South Central	1931	10	42	6.0	49.2	50.0	101.6	.466	22.92	23.29
	1933	5	22	5.8	51.3	49.6	96.7	.374	19.18	18.54
Western	1931	22	82	6.0	48.0	49.2	102.5	.479	23.01	23.57
	1933	14	62	6.0	48.1	48.4	100.6	.496	23.86	24.02
Total	1931	77	332	6.0	48.5	50.0	103.1	.441	21.39	22.08
	1933	47	237	5.9	50.1	49.3	98.4	.423	21.19	20.87
Porters, male:										
North Atlantic	1931	3	5	6.0	48.0	48.0	100.0	.361	17.31	17.31
	1933	7	13	6.0	51.4	51.4	100.0	.264	13.57	13.57
East North Central	1931	6	9	6.0	48.0	48.0	100.0	.174	8.35	8.35
	1933	4	5	6.2	52.2	52.2	100.0	.180	9.38	9.38
West North Central	1931	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
	1933	2	3	6.3	52.7	52.7	100.0	.380	19.99	19.99
South Atlantic	1931	11	16	6.0	48.0	48.0	100.0	.207	9.93	9.93
	1933	11	16	6.0	53.6	53.6	100.0	.179	9.59	9.59
South Central	1931	6	11	6.1	48.7	48.7	100.0	.250	12.17	12.17
	1933	9	13	6.1	50.8	50.8	100.0	.237	12.07	12.07
Western	1931	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
	1933	1	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Total	1931	28	44	6.0	48.2	48.2	100.0	.240	11.54	11.54
	1933	34	51	6.1	52.0	52.0	100.0	.230	11.98	11.98
Radio mechanics, male:										
North Atlantic	1931	5	8	6.0	48.0	48.0	100.0	.749	35.96	35.96
	1933	5	10	6.2	51.7	51.7	100.0	.632	32.69	32.69
East North Central	1931	4	20	6.0	48.0	48.0	100.0	.725	34.81	34.81
	1933	7	27	6.3	49.6	51.8	104.5	.638	31.65	33.04
West North Central	1931	3	15	5.9	48.0	47.7	99.4	.716	34.37	34.12
	1933	4	22	6.0	49.1	49.1	100.0	.610	29.93	29.93
South Atlantic	1931	3	15	6.0	48.0	48.0	100.0	.637	30.58	30.58
	1933	3	7	6.0	54.0	54.0	100.0	.565	30.49	30.49
South Central	1931	6	11	6.0	48.0	48.0	100.0	.751	36.07	36.07
	1933	2	9	6.0	51.3	51.3	100.0	.671	34.44	34.44
Western	1931	3	25	6.0	48.0	48.0	100.0	.624	29.94	29.94
	1933	5	14	6.0	48.0	48.0	100.0	.745	35.75	35.75
Total	1931	24	94	6.0	48.0	47.9	99.8	.688	33.01	32.97
	1933	26	89	6.1	50.0	50.6	101.3	.644	32.20	32.60
Radio operators, male:										
North Atlantic	1931	10	20	6.0	48.0	48.0	100.0	.705	33.85	33.85
	1933	10	25	6.1	49.8	49.8	100.0	.658	32.72	32.72
East North Central	1931	10	24	6.0	48.0	48.0	100.0	.646	31.00	31.00
	1933	12	21	6.2	48.6	48.6	100.0	.655	31.83	31.83
West North Central	1931	13	27	6.0	48.0	48.0	100.0	.681	32.71	32.71
	1933	15	27	6.0	46.7	46.7	100.0	.649	30.33	30.33
South Atlantic	1931	11	21	6.0	48.0	48.0	100.0	.719	34.50	34.50
	1933	10	28	6.9	55.6	55.6	100.0	.526	29.26	29.26
South Central	1931	14	30	6.2	49.9	49.9	100.0	.711	35.43	35.43
	1933	12	19	6.1	50.6	50.6	100.0	.669	33.86	33.86
Western	1931	23	62	6.0	48.4	48.4	100.0	.751	36.36	36.36
	1933	32	63	6.3	50.5	50.5	100.0	.686	34.63	34.63
Total	1931	81	184	6.1	48.4	48.4	100.0	.712	34.49	34.49
	1933	91	183	6.3	50.4	50.4	100.0	.645	32.51	32.51

[2] Data included in total but not given separately, to avoid identification.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS, AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED—Continued

For men: Occupation and district. For men and women: District (all occupations combined)	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
Stock clerks, male:										
North Atlantic	1931	2	4	6.0	48.0	48.0	100.0	$0.535	$25.68	$25.68
	1933	2	5	6.0	53.4	53.4	100.0	.447	23.86	23.86
East North Central	1931	6	19	6.1	46.7	50.2	107.5	.559	26.11	28.09
	1933	3	12	6.3	48.7	52.6	108.1	.582	28.32	30.60
West North Central	1931	3	13	5.9	48.0	47.3	98.5	.496	23.80	23.47
	1933	4	22	6.0	49.0	49.0	100.0	.511	24.99	24.99
South Atlantic	1931	3	13	6.0	48.0	48.0	100.0	.514	24.68	24.68
	1933	2	16	6.0	54.0	54.0	100.0	.349	18.82	18.82
South Central	1931	3	10	6.0	49.8	49.8	100.0	.601	29.89	29.89
	1933	1	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Western	1931	7	23	6.0	48.0	48.0	100.0	.599	28.75	28.75
	1933	6	15	6.0	48.0	48.0	100.0	.583	28.00	28.00
Total	1931	24	82	6.0	47.9	48.6	101.5	.557	26.70	27.10
	1933	18	74	6.1	50.2	50.9	101.3	.496	24.90	25.23
Other ground-personnel employees, skilled, male:										
North Atlantic	1931	9	13	6.0	48.2	49.9	103.5	.801	38.62	40.01
	1933	19	48	6.0	49.1	49.1	100.0	.857	42.12	42.12
East North Central	1931	11	40	6.1	47.8	50.3	105.2	.817	39.05	41.08
	1933	28	60	6.1	48.6	48.6	100.0	.792	38.46	38.46
West North Central	1931	9	22	5.4	47.7	41.9	87.8	.851	40.58	35.68
	1933	16	67	5.9	47.2	46.1	97.6	.733	34.62	33.78
South Atlantic	1931	9	28	6.0	48.1	48.1	100.0	.864	41.52	41.52
	1933	14	53	6.0	52.8	52.8	100.0	.667	35.21	35.21
South Central	1931	8	16	6.1	49.0	49.2	100.4	.645	31.61	31.73
	1933	35	61	6.1	50.8	50.9	100.2	.710	36.07	36.10
Western	1931	7	24	6.0	48.0	47.9	99.8	.859	41.23	41.11
	1933	35	70	6.0	48.5	48.2	99.3	.915	44.37	44.06
Total	1931	53	143	5.9	48.0	48.0	100.0	.817	39.19	39.19
	1933	147	359	6.0	49.4	49.1	99.5	.780	38.53	38.29
Other ground-personnel employees, unskilled, male:										
North Atlantic	1931	6	7	6.1	52.9	52.9	100.0	.363	19.19	19.19
	1933	1	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
East North Central	1931	9	23	6.4	55.3	57.9	104.7	.380	21.00	21.99
	1933	9	31	6.4	49.7	52.0	104.7	.421	20.94	21.93
West North Central	1931	3	15	5.8	52.4	49.4	94.3	.434	22.73	21.41
	1933	8	40	5.9	47.9	47.1	98.3	.341	16.35	16.09
South Atlantic	1931	3	56	6.0	48.0	48.8	101.7	.381	18.30	18.62
	1933	4	5	6.0	51.6	51.6	100.0	.246	12.69	12.69
South Central	1931	10	65	6.1	51.2	51.4	100.4	.364	18.65	18.73
	1933	6	22	6.0	51.4	51.4	100.0	.371	19.06	19.06
Western	1931	5	15	6.3	55.7	59.2	106.3	.445	24.76	26.30
	1933	9	19	6.2	48.3	48.3	100.0	.442	21.37	21.37
Total	1931	36	181	6.1	51.3	52.0	101.4	.384	19.72	19.98
	1933	37	118	6.1	49.3	49.6	100.7	.380	18.73	18.86
All ground-personnel employees, male:										
North Atlantic	1931	22	250	6.0	48.3	49.0	101.4	.678	32.76	33.26
	1933	21	331	6.0	50.0	50.0	100.0	.610	30.51	30.51
East North Central	1931	39	705	6.1	48.5	51.1	105.4	.629	30.49	32.16
	1933	30	671	6.2	49.4	50.4	101.9	.646	31.91	32.55
West North Central	1931	28	385	5.8	48.3	47.6	98.6	.640	30.96	30.50
	1933	25	606	5.9	48.3	47.2	97.8	.590	28.50	27.87

[3] Data included in total but not given separately, to avoid identification.

TABLE 3.—HOURS AND EARNINGS OF GROUND PERSONNEL: FULL-TIME AND CREDITED HOURS PER WEEK, EARNINGS PER HOUR ON BASIS OF CREDITED HOURS, AND FULL-TIME AND ACTUAL EARNINGS PER WEEK, BY OCCUPATION AND DISTRICT FOR MEN AND BY DISTRICT AND SEX FOR ALL OCCUPATIONS COMBINED—Continued

For men: Occupation and district. For men and women: District (all occupations combined)	Year	Number of local units	Number of employees	Time				Earnings		
				Average days per full-time week	Average full-time hours per week	Average credited hours per week		Average earnings per hour	Average full-time earnings per week	Average actual earnings per week
						Number	Percent of credited to full time			
All ground-personnel employees, male—Continued.										
South Atlantic	1931	30	454	6.0	48.1	48.9	101.7	$0.603	$29.00	$29.48
	1933	24	378	6.1	53.4	53.4	100.0	.512	27.34	27.34
South Central	1931	49	454	6.0	49.4	49.5	100.2	.597	29.51	29.58
	1933	39	357	6.1	50.9	51.4	101.0	.580	29.52	29.77
Western	1931	46	663	6.0	48.3	49.4	102.3	.712	34.37	35.13
	1933	46	604	6.0	48.5	48.5	100.0	.690	33.49	33.49
Total	1931	214	2,911	6.0	48.5	49.5	102.1	.645	31.26	31.89
	1933	185	2,947	6.0	49.7	49.8	100.1	.613	30.47	30.55
All ground-personnel employees, female:										
North Atlantic	1931	2	4	6.0	48.0	48.0	100.0	.445	21.35	21.35
	1933	5	10	6.0	49.4	49.4	100.0	.470	23.23	23.23
East North Central	1931	8	15	6.0	48.0	48.0	100.0	.493	23.65	23.65
	1933	9	25	6.0	45.3	44.8	98.9	.478	21.65	21.41
West North Central	1931	6	9	6.0	48.0	48.0	100.0	.535	25.68	25.68
	1933	6	15	6.1	46.4	46.4	100.0	.499	23.13	23.13
South Atlantic	1931	7	22	6.0	48.0	48.0	100.0	.517	24.82	24.82
	1933	7	16	6.0	51.4	51.4	100.0	.352	18.09	18.09
South Central	1931	5	11	6.0	48.0	48.0	100.0	.474	22.76	22.76
	1933	8	12	6.0	45.5	45.5	100.0	.431	19.59	19.59
Western	1931	8	27	6.0	48.0	48.0	100.0	.487	23.39	23.39
	1933	8	21	6.0	45.7	45.7	100.0	.499	22.80	22.80
Total	1931	36	88	6.0	48.0	48.0	100.0	.497	23.85	23.85
	1933	43	99	6.0	47.0	46.8	99.7	.457	21.48	21.39
All ground-personnel employees, male and female:										
North Atlantic	1931	22	254	6.0	48.3	49.0	101.4	.675	32.59	33.07
	1933	21	341	6.0	50.0	50.0	100.0	.606	30.30	30.30
East North Central	1931	39	720	6.1	48.5	51.1	105.4	.626	30.36	31.98
	1933	30	696	6.2	49.3	50.2	101.8	.641	31.60	32.15
West North Central	1931	28	394	5.8	48.3	47.6	98.6	.639	30.84	30.39
	1933	25	621	5.9	48.3	47.2	97.9	.588	28.40	27.75
South Atlantic	1931	30	476	6.0	48.1	48.9	101.7	.599	28.82	29.27
	1933	24	394	6.1	53.3	53.3	100.0	.506	26.96	26.96
South Central	1931	49	465	6.0	49.3	49.5	100.4	.595	29.31	29.42
	1933	39	369	6.1	50.7	51.2	101.0	.575	29.15	29.44
Western	1931	46	690	6.0	48.3	49.3	102.1	.703	33.96	34.67
	1933	46	625	6.0	48.4	48.4	100.0	.684	33.13	33.13
Total	1931	214	2,999	6.0	48.5	49.4	101.9	.640	31.05	31.66
	1933	185	3,046	6.0	49.7	49.7	100.0	.608	30.25	30.25

Classified Hours and Mileage Flown by Pilots, 1933

TABLE 4 presents a distribution of the individual pilots in all districts by classified hours and mileage actually flown during the month of July 1933. Of the 452 pilots for whom data are shown, 321 or 71 percent flew from 70 to 110 hours, and 320 or 70.8 percent flew from 7,000 to 13,000 miles.

TABLE 4.—NUMBER OF PILOTS BY FLIGHT-HOURS AND MILEAGE FLOWN

Fifteen Commercial Air Transport Companies, United States, July 1933

Flight-hours	Total number of pilots	Mileage flown																
		Under 2,000	2,000 and under 3,000	3,000 and under 4,000	4,000 and under 5,000	5,000 and under 6,000	6,000 and under 7,000	7,000 and under 8,000	8,000 and under 9,000	9,000 and under 10,000	10,000 and under 11,000	11,000 and under 12,000	12,000 and under 13,000	13,000 and under 14,000	14,000 and under 15,000	15,000 and under 16,000	16,000 and under 17,000	17,000 and over
Under 15	3	3																
15 and under 20	1		1															
20 and under 25	1			1														
25 and under 30	3	1	1		1													
30 and under 35	4			4														
35 and under 40	3			1	1	1												
40 and under 45	7				6	1												
45 and under 50	5				1	1	3											
50 and under 55	17			1	2	8	4	1	1									
55 and under 60	19					8	8	2			1							
60 and under 65	17				1	3	8	3	2									
65 and under 70	13					3		2	1	3	3	1						
70 and under 75	23						4	8	4	3	4							
75 and under 80	33							9	7	4	6	5	2					
80 and under 85	31						2	2	12	5	5	4	1					
85 and under 90	49							5	4	14	9	6	10	1				
90 and under 95	58							2	7	9	11	8	7	10	1	1	1	1
95 and under 100	53							1	3	14	9	7	1	11	3	4		
100 and under 105	37								1	7	12	6	7	1	3			
105 and under 110	37									1	11	13	7	2		2	1	
110 and under 115	22								1	1	4	2	8	1	3	1	1	
115 and under 120	12										1	2	4	2	3			
120 and under 125	1											1						
125 and under 130	2											1	1					
130 and over	1												1					
Total	452	4	2	7	12	25	29	35	43	61	76	56	49	28	13	8	3	1

Actual Earnings of Pilots and Copilots, July 1933, by District

TABLE 5 shows for each geographic district and for all districts combined the number of pilots and of copilots in each classified group of earnings in July 1933. The earnings for each person include his basic salary per month, or proportionate part thereof for any portion of the month that he was on the pay roll in the month, and his mileage earnings for miles or hours flown, if any. Table 5 also shows the distribution of pilots in all districts by subsidized and nonsubsidized companies.

Seven of the 452 pilots covered in the study earned less than $150 in July—4 in nonsubsidized companies and 3 in subsidized. Low earnings in subsidized companies were probably due to the fact that the pilots were not on the rolls the entire month and that their hours of flight were few or none in the month. The earnings of 33 pilots (7.3 percent) were $1,000 and over.

TABLE 5.—ACTUAL EARNINGS OF PILOTS AND COPILOTS BY DISTRICT, AND ACTUAL EARNINGS OF PILOTS IN ALL DISTRICTS ACCORDING TO SUBSIDIZATION OF COMPANIES

Fifteen Commercial Air Transport Companies, United States, July 1933

Actual earnings	Pilots							Copilots							Pilots, all districts	
	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total	Subsidized	Nonsubsidized
Under $150		1			1	5	7		5	4	1			10	3	4
$150 and under $160								3	1	6	1		5	16		
$160 and under $170										3				3		
$170 and under $180			2		1		3					1		1		3
$180 and under $190									1			1		2		
$190 and under $200			2				2		2	2			2	6		2
$200 and under $210		1					1	1	1			2		4	1	
$210 and under $220					1	1	2		2	2			2	6	1	1
$220 and under $230				1			1	1	10			4	13	28	1	
$230 and under $240			1			1	2		15	4		3	10	32	2	
$240 and under $250		1					1	3	14	1			10	28	1	
$250 and under $275		2	1	1		1	5	4	15	6		8	26	59	4	1
$275 and under $300	1	1			1		3	2	4				2	8	3	
$300 and under $325		6	3	1		1	11	2					1	3	11	
$325 and under $350		2	1		1	1	5					1		1	4	1
$350 and under $400	1	3	3	1	8	11	27	2						2	21	6
$400 and under $450	2	4	7	4	6	5	28	1						1	28	
$450 and under $500	5	6	2	2	1	3	19								19	
$500 and under $550	7	10	9	4	4	9	43								43	
$550 and under $600	4	12	10	9	10	12	57								57	
$600 and under $650	4	7	4	5	9	9	38								38	
$650 and under $700	3	8	10	5		7	33								33	
$700 and under $750	7	6	5	2	3	13	36								36	
$750 and under $800	8	6	2	2	8	6	32								32	
$800 and under $850		6	1	3	7	12	29								29	
$850 and under $900	1	6	4		1	2	14								14	
$900 and under $950		3				3	6								6	
$950 and under $1,000	1	4	2			7	14								14	
$1,000 and under $1,050	3	2	2			2	9								9	
$1,050 and under $1,100	1	6				6	13								13	
$1,100 and under $1,150	4	2	2			1	9								9	
$1,150 and under $1,200						2	2								2	
Total	52	105	73	40	62	120	452	19	70	28	2	20	71	210	434	18

Average and Classified Full-Time Hours per Week, 1931 and 1933, by Occupation

TABLE 6 shows for each of the occupations in air transportation, except pilots and copilots, average full-time hours per week and the percent of employees at each classified number of hours per week for the years 1931 and 1933.

Full-time hours per week are those established by a regular time of beginning and quitting work on each day of the week less any regular time off duty for dinner, lunch, or other meal.

In 1933, the full-time hours per week of 49 percent of the 2,947 males were 48, while the full-time hours of 44 percent of the 99 females were 44.

TABLE 6.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK OF GROUND PERSONNEL, BY OCCUPATION [1]

Fifteen Commercial Air Transport Companies, United States, October 1931 and July 1933

Occupation	Year	Number of local units	Number of employees	Average full-time hours per week	Percent of employees whose full-time hours per week were—												
					42 and under	44	45	48	50	Over 50, under 54	54	56	Over 56, under 60	60	63	70	77 and over
Agents, traffic, male	1931	103	175	48.0	1	----	----	97	1	----	1	1	----	----	----	----	----
	1933	59	124	48.8	----	9	----	73	----	6	3	9	----	----	----	----	----
Chauffeurs, male	1931	17	41	48.3	----	2	----	93	----	----	----	5	----	----	----	----	----
	1933	18	40	48.4	----	8	----	80	----	3	10	----	----	----	----	----	----
Clerks and stenographers, male	1931	43	107	48.2	----	----	----	95	----	4	----	1	----	----	----	----	----
	1933	51	170	48.4	----	12	7	47	----	35	----	----	----	----	----	----	----
Crew chiefs, male	1931	14	44	48.7	----	----	----	89	----	----	11	----	----	----	----	----	----
	1933	3	15	49.2	----	----	----	80	----	----	20	----	----	----	----	----	----
Dispatchers, male	1931	52	118	47.9	1	----	----	88	11	----	----	----	----	----	----	----	----
	1933	65	146	51.7	----	4	----	12	----	43	37	3	2	----	----	----	----
Inspectors, male	1931	13	25	48.0	----	4	----	88	----	8	----	----	----	----	----	----	----
	1933	7	23	50.8	----	----	----	48	----	13	35	4	----	----	----	----	----
Janitors, male	1931	30	73	53.0	----	1	----	67	----	----	7	3	----	8	1	8	4
	1933	25	52	49.3	----	17	----	40	----	21	19	2	----	----	----	----	----
Machinists and toolmakers, male	1931	9	19	47.2	----	21	----	79	----	----	----	----	----	----	----	----	----
	1933	6	14	49.1	----	----	----	64	----	36	----	----	----	----	----	----	----
Mechanics, airplane, licensed, male	1931	23	162	48.7	----	10	----	86	----	2	2	----	----	----	----	----	----
	1933	18	123	49.3	----	2	----	61	----	28	9	----	----	----	----	----	----
Mechanics, engine, licensed, male	1931	31	150	48.0	----	11	----	75	----	10	3	----	----	----	----	----	----
	1933	23	152	49.3	----	1	----	66	----	21	11	----	----	----	----	----	----
Mechanics, airplane and engine, licensed, male	1931	115	588	48.4	(2)	1	----	87	----	7	4	1	----	----	----	----	----
	1933	97	509	49.9	(2)	3	----	47	----	36	12	2	(2)	----	----	----	----
Mechanics, airplane or engine, not licensed, male	1931	28	170	47.9	----	10	----	81	----	6	2	----	----	----	----	----	----
	1933	42	332	50.0	----	2	----	51	----	28	18	1	(2)	----	----	----	----
Mechanics, chief, male	1931	70	119	48.0	----	5	----	89	----	4	1	1	----	----	----	----	----
	1933	45	87	49.3	----	15	1	46	----	15	18	2	2	----	----	----	----
Mechanics' helpers, licensed, male	1931	33	60	47.7	2	10	----	88	----	----	----	----	----	----	----	----	----
	1933	19	49	48.9	----	2	----	80	----	4	14	----	----	----	----	----	----
Mechanics' helpers, not licensed, male	1931	77	332	48.5	(2)	4	----	82	----	5	8	(2)	----	----	----	----	----
	1933	47	237	50.1	----	1	----	46	----	32	20	(2)	----	----	----	----	----
Porters, male	1931	28	44	48.2	----	----	----	98	----	----	----	2	----	----	----	----	----
	1933	34	51	52.0	----	2	----	6	----	51	37	2	2	----	----	----	----
Radio mechanics, male	1931	24	94	48.0	----	----	----	100	----	----	----	----	----	----	----	----	----
	1933	26	89	50.0	----	2	----	43	----	43	10	2	----	----	----	----	----
Radio operators, male	1931	81	184	48.4	----	----	----	95	----	----	----	5	----	----	----	----	----
	1933	91	183	50.4	----	10	----	39	----	25	----	26	----	----	----	----	----

[1] Definitions of occupations may be found in U.S. Bureau of Labor Statistics Bul. No. 575, pp. 34–41.
[2] Less than 1 percent.

TABLE 6.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK OF GROUND PERSONNEL, BY OCCUPATION—Continued

Occupation	Year	Number of local units	Number of employees	Average full-time hours per week	Percent of employees whose full-time hours per week were—											
					42 and under	44	45	48	50	Over 50, under 54	54	56	Over 56, under 60	60	63	70	77 and over
Stock clerks, male	1931	24	82	47.9	----	7	----	84	----	9	----	----	----	----	----	----	----
	1933	18	74	50.2	----	5	----	42	----	24	28	----	----	----	----	----	----
Other ground-personnel employees, skilled, male.	1931	53	143	48.0	1	3	----	92	1	2	1	1	----	----	----	----	----
	1933	147	359	49.4	----	10	----	54	----	18	14	3	2	----	----	----	----
Other ground-personnel employees, unskilled, male.	1931	36	181	51.3	----	1	----	73	----	15	1	3	----	1	----	1	7
	1933	37	118	49.3	3	3	----	61	----	23	4	3	3	----	----	----	----
All ground-personnel employees, male.	1931	214	2,911	48.5	(1)	3	----	86	1	5	3	1	----	(1)	(1)	(1)	1
	1933	185	2,947	49.7	(1)	5	(1)	49	----	27	14	3	1	----	----	----	(1)
All ground-personnel employees, female.	1931	36	88	48.0	----	----	----	100	----	----	----	----	----	----	----	----	----
	1933	43	99	47.0	----	44	4	37	----	----	13	1	----	----	----	----	----
All ground-personnel employees, male and female.	1931	214	2,999	48.5	(1)	3	----	87	1	4	3	1	----	(1)	(1)	(1)	1
	1933	185	3,046	49.7	(1)	7	1	49	----	26	14	3	1	----	----	----	(1)

[1] Less than 1 percent.

Progress in Civil Aeronautics

AIR transportation of mail and passengers was practically in an experimental state until 1928, when the operation of aircraft on scheduled routes really became a recognized public service. In the past 2 years, air-mail postage rates have been increased 60 percent with a resultant decrease in poundage carried and the subsidy to the companies by the United States Post Office Department has been decreased approximately 30 percent. In an attempt to counteract this decrease in revenue, the industry has tried to stimulate passenger travel by reducing fares to a level slightly higher than first-class rail fares. The industry has continued to grow even in the presence of unfavorable economic conditions. Table 7, taken from Air Commerce Bulletins of the United States Department of Commerce, shows that total personnel employed increased from 462 in 1927, the first year for which data are available, to 1,496 in 1928, to 2,345 in 1929, to 3,475 in 1930, to 4,290 in 1931, to 5,588 in 1932, and to 5,997 on July 1, 1933. The number of passengers carried increased from year to year from 5,782 in 1926 to 540,681 in 1932, and decreased to 235,139 for the first six months of 1933, which may be compared with 248,954 for the corresponding period of 1932.

TABLE 7.—PROGRESS IN CIVIL AERONAUTICS, DOMESTIC COMMERCIAL TRANSPORT COMPANIES, 1926 TO JULY 1, 1933

[From Air Commerce Bulletins, United States Department of Commerce]

Item	1926	1927	1928	1929	1930	1931	1932	1933 (first 6 months)
Pilots and copilots employed	(1)	107	308	562	675	690	709	785
Total personnel employed	(1)	462	1,496	2,345	3,475	4,290	5,588	5,997
Number of planes in transport service	69	128	325	525	600	590	564	544
Passengers carried on transport lines	5,782	8,679	49,713	173,405	417,505	522,345	540,681	235,139
Airplane miles flown by all operators	4,318,087	5,870,489	10,673,450	25,141,499	36,945,203	47,385,987	50,932,967	25,862,120
Miles of mail airways in operation	8,039	8,223	14,561	26,597	41,501	43,735	45,436	48,357
Mileage of lighted airways	2,041	4,468	6,988	12,448	15,258	17,512	19,500	18,100
Electric and gas beacons	612	760	1,188	1,311	1,652	1,836	1,988	1,831
Municipal airports	(1)	240	368	453	550	636	549	550

1 Data not available.

Wage-Rate Changes in American Industries

Manufacturing Industries

THE following table presents information concerning wage-rate adjustments occurring between December 15, 1933, and January 15, 1934, as shown by reports received from manufacturing establishments supplying employment data to this Bureau.

Increases in wage rates averaging 12.5 percent and affecting 19,874 employees were reported by 204 of the 17,805 establishments surveyed in January. Of these, 8 automobile establishments reported increases averaging 9.6 percent, affecting 2,292 employees; 16 establishments in the foundry and machine-shop products industry averaged increases of 10.5 percent, affecting 2,250 employees; 9 establishments in the rubber goods other than boots, shoes, tires, and inner tubes industry had average increases of 7.5 percent, affecting 1,768 workers; 8 establishments in the slaughtering and meat-packing industry averaged increases of 8.4 percent, affecting 2,190 employees; 5 pottery establishments averaged increases of 12.5 percent, affecting 1,454 employees; and 4 establishments in the paper and pulp industry reported average wage-rate increases of 9.5 percent, affecting 1,444 employees.

Of the 17,805 manufacturing establishments included in the January survey, 17,578 establishments, or 98.7 percent of the total, reported no change in wage rates over the month interval. The 3,056,501 employees not affected by changes in wage rates constituted 99.3 percent of the total number of employees covered by the January trend-of-employment survey of manufacturing industries.

Twenty-three manufacturing establishments in 10 industries reported wage-rate decreases affecting 1,103 employees between December and January.

TABLE 1.—WAGE-RATE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING JAN. 15, 1934

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
All manufacturing industries	17,805	3,077,478	17,578	204	23	3,056,501	19,874	1,103
Percent of total	100.0	100.0	98.7	1.1	.1	99.3	.6	(1)
Food and kindred products:								
Baking	964	64,416	960	4		64,113	303	
Beverages	388	23,043	383	5		22,892	151	
Butter	277	4,222	274	3		4,202	20	
Confectionery	287	32,409	286	1		31,909	500	
Flour	402	16,894	398	4		16,812	82	
Ice cream	347	8,912	347			8,912		
Slaughtering and meat packing	246	104,139	238	8		101,949	2,190	
Sugar, beet	60	11,277	60			11,277		
Sugar refining, cane	13	7,891	13			7,891		
Textiles and their products:								
Fabrics:								
Carpets and rugs	27	16,405	27			16,405		
Cotton goods	693	301,337	687	6		301,136	201	
Cotton small wares	109	9,102	107	2		8,996	106	
Dyeing and finishing textiles	147	38,695	146	1		38,649	46	
Hats, fur-felt	33	5,735	33			5,735		
Knit goods	440	103,780	438	2		102,919	861	
Silk and rayon goods	243	46,414	243			46,414		
Woolen and worsted goods	244	64,875	244			64,875		
Wearing apparel:								
Clothing, men's	392	60,485	389	2	1	60,331	52	102
Clothing, women's	503	26,101	487	15	1	25,596	498	7
Corsets and allied garments	31	5,446	31			5,446		
Men's furnishings	69	5,217	69			5,217		
Millinery	126	7,434	115	11		7,034	400	
Shirts and collars	117	13,098	117			13,098		
Iron and steel and their products, not including machinery:								
Bolts, nuts, washers, and rivets	53	8,085	51	2		7,605	480	
Cast-iron pipe	44	7,487	44			7,487		
Cutlery (not including silver and plated cutlery) and edge tools	132	10,606	130	2		10,538	68	
Forgings, iron and steel	65	7,928	65			7,928		
Hardware	81	30,250	77	4		30,089	161	
Iron and steel	208	232,110	207	1		231,630	480	
Plumbers' supplies	71	5,773	69	2		5,741	32	
Steam and hot-water heating apparatus and steam fittings	88	18,671	87	1		18,611	60	
Stoves	160	18,013	159	1		17,975	38	
Structural and ornamental metalwork	198	15,200	195	3		15,109	91	
Tin cans and other tinware	56	8,349	50	6		7,895	454	
Tools (not including edge tools, machine tools, files, and saws)	114	8,448	108	6		8,425	23	
Wirework	71	7,624	70	1		7,330	294	
Machinery, not including transportation equipment:								
Agricultural implements	77	11,251	77			11,251		
Cash registers, adding machines, and calculating machines	26	14,729	25	1		14,688	41	
Electrical machinery, apparatus, and supplies	280	96,897	279	1		96,378	519	
Engines, turbines, tractors, and water wheels	88	22,950	86	2		22,934	16	
Foundry and machine-shop products	1,015	110,878	999	16		108,628	2,250	
Machine tools	154	16,041	153	1		15,984	57	
Radios and phonographs	34	27,725	34			27,725		
Textile machinery and parts	53	10,339	53			10,339		
Typewriters and supplies	12	12,667	12			12,667		

[1] Less than one tenth of 1 percent.

TABLE 1.—WAGE-RATE CHANGES IN **MANUFACTURING** INDUSTRIES DURING MONTH ENDING JAN. 15, 1934—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Nonferrous metals and their parts:								
Aluminum manufactures	23	5,936	23			5,936		
Brass, bronze, and copper products	214	37,229	207	7		36,781	448	
Clocks and watches and time-recording devices	25	8,363	25			8,363		
Jewelry	121	7,043	121			7,043		
Lighting equipment	51	3,302	50	1		3,297	5	
Silverware and plated ware	58	8,519	56	1	1	8,505	4	10
Smelting and refining—copper, lead, and zinc	39	13,264	39			13,264		
Stamped and enameled ware	101	15,850	99	2		15,634	216	
Transportation equipment:								
Aircraft	23	7,642	23			7,642		
Automobiles	221	254,587	212	8	1	252,279	2,292	16
Cars, electric- and steam-railroad	51	9,718	51			9,718		
Locomotives	11	2,489	11			2,489		
Shipbuilding	100	29,290	98	2		29,110	180	
Railroad repair shops:								
Electric railroad	366	18,830	364	2		18,668	162	
Steam railroad	533	69,455	529	4		69,380	75	
Lumber and allied products:								
Furniture	448	45,598	444	3	1	45,405	112	81
Lumber:								
Millwork	478	18,661	478			18,661		
Sawmills	603	67,581	602	1		67,526	55	
Turpentine and rosin	19	1,463	19			1,463		
Stone, clay, and glass products:								
Brick, tile, and terra cotta	637	15,635	630	5	2	15,440	183	12
Cement	121	9,495	121			9,495		
Glass	176	48,055	174	2		47,985	70	
Marble, granite, slate, and other products	208	4,342	208			4,342		
Pottery	112	17,528	107	5		16,074	1,454	
Leather and its manufactures:								
Boots and shoes	307	104,374	306	1		104,325	49	
Leather	149	31,062	149			31,062		
Paper and printing:								
Boxes, paper	319	23,852	305	13	1	23,429	418	5
Paper and pulp	424	100,710	420	4		99,266	1,444	
Printing and publishing:								
Book and job	744	46,836	742	2		46,812	24	
Newspapers and periodicals	451	58,418	449	2		58,339	79	
Chemicals and allied products:								
Chemicals	110	27,737	109	1		27,681	56	
Cottonseed—oil, cake, and meal	107	4,889	95	1	11	4,012	33	844
Druggists' preparations	56	8,083	56			8,083		
Explosives	30	4,286	30			4,286		
Fertilizers	166	9,333	165	1		9,300	33	
Paints and varnishes	324	15,643	311	10	3	15,402	227	14
Petroleum refining	148	62,454	148			62,454		
Rayon and allied products	23	33,938	23			33,938		
Soap	104	14,593	103	1		14,558	5	
Rubber products:								
Rubber boots and shoes	9	13,304	9			13,304		
Rubber goods, other than boots, shoes, tires, and inner tubes	92	17,828	82	9	1	16,048	1,768	12
Rubber tires and inner tubes	38	54,271	38			54,271		
Tobacco manufactures:								
Chewing and smoking tobacco and snuff	31	9,861	31			9,861		
Cigars and cigarettes	196	36,783	194	2		36,775	8	

Nonmanufacturing Industries

DATA concerning wage-rate changes occurring between December 15, 1933, and January 15, 1934, reported by cooperating establishments in 14 nonmanufacturing industries are presented in table 2.

No changes in wage rates were reported in the anthracite mining and telephone and telegraph industries. Increases were reported in each of the remaining 13 industries and decreases were reported in five industries over the month interval. In the banks-brokerage-insurance-real-estate group 57 establishments reported an average increase of 5.8 percent for 3,037 employees; hotels averaged an increase of 20.1 percent affecting 1,601 employees; bituminous-coal mining reported an average increase of 5.7 percent affecting 1,048 employees; and 1,051 power and light employees averaged a 14.9 percent increase. The wage-rate decreases were inconsequential, affecting less than 100 employees in any one industry.

TABLE 2.—WAGE-RATE CHANGES IN NONMANUFACTURING INDUSTRIES DURING MONTH ENDING JAN. 15, 1934

Industrial group	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage-rate changes	Wage-rate increases	Wage-rate decreases	No wage-rate changes	Wage-rate increases	Wage-rate decreases
Anthracite mining	160	89,077	160			89,077		
Percent of total	100.0	100.0	100.0			100.0		
Bituminous-coal mining	1,508	231,175	1,492	16		230,127	1,048	
Percent of total	100.0	100.0	98.9	1.1		99.5	.5	
Metalliferous mining	283	25,903	281	2		25,398	505	
Percent of total	100.0	100.0	99.3	.7		98.1	1.9	
Quarrying and nonmetallic mining	1,144	26,217	1,138	6		26,149	68	
Percent of total	100.0	100.0	99.5	.5		99.7	.3	
Crude petroleum producing	254	27,750	253	1		27,690	60	
Percent of total	100.0	100.0	99.6	.4		99.8	.2	
Telephone and telegraph	8,244	252,032	8,244			252,032		
Percent of total	100.0	100.0	100.0			100.0		
Power and light	3,098	205,570	3,096	2		204,519	1,051	
Percent of total	100.0	100.0	99.9	.1		99.5	.5	
Electric-railroad and motor-bus operation and maintenance	503	129,599	500	3		127,965	1,634	
Percent of total	100.0	100.0	99.4	.6		98.7	1.3	
Wholesale trade	2,993	85,182	2,978	9	6	85,032	116	34
Percent of total	100.0	100.0	99.5	.3	.2	99.8	.1	(1)
Retail trade	18,609	415,461	18,571	14	24	415,281	140	40
Percent of total	100.0	100.0	99.8	.1	.1	100.0	(1)	(1)
Hotels	2,294	114,014	2,230	64		112,413	1,601	
Percent of total	100.0	100.0	97.2	2.8		98.6	1.4	
Laundries	1,240	64,529	1,232	4	4	64,412	29	88
Percent of total	100.0	100.0	99.4	.3	.3	99.8	(1)	.1
Dyeing and cleaning	334	9,455	333	1		9,446	9	
Percent of total	100.0	100.0	99.7	.3		99.9	.1	
Banks, brokerage, insurance, and real estate	4,469	175,943	4,399	57	13	172,857	3,037	49
Percent of total	100.0	100.0	98.4	1.3	.3	98.2	1.7	(1)

[1] Less than one tenth of 1 percent.

Wage Changes Reported by Trade Unions and Municipalities Since November 1933

CHANGES in hours and wages for the past 4 months which were reported to the Bureau by trade unions and municipalities during the past month are shown in the table following. The report covers 30,214 workers of whom 2,909 were reported to have gone on the 5-day week. In addition 467 workers were shown to be working even less time.

While a few reductions in wages may be noted, the majority show quite substantial increases.

WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER 1933 TO FEBRUARY 1934

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Barbers, Santa Rosa, Calif.	Nov. 5	*Per week* $26.50	*Per week* $24.00	54	48
Brewery and soft-drink workers:					
Binghamton, N.Y.	Nov. 18	*Per hour* .40–.50	25.00–30.00	[1]9–12	40
Michigan City, Ind.	Dec. 11	*Per week* 14.75	27.50	60–70	40
New Philadelphia, Ohio	Jan. 16	14.00–28.00	17.00–28.00	48	40
Peoria, Ill.	Dec. 1	*Per hour* .50– .85	*Per hour* .57½–.90	48	40
Potosi, Wis.	Nov. 20	*Per week* 18.00–24.00	*Per week* 20.00–25.00	54	40
Building trades:					
Santa Barbara, Calif.:		*Per hour*	*Per hour*		
Carpenters	Feb. 1	1.16⅔	1.00	30	35
Lathers	Dec. 1	.93	1.25	40	30
Painters	do	.75	1.25	40	30
Grand Island, Nebr.: Plumbers	Nov. 1	.65	.75	48	35
Chauffeurs and teamsters:		*Per week*	*Per week*		
Cheyenne, Wyo.	Dec. 1	24.00	27.00	40	48
Denver, Colo., milk-wagon drivers	Dec. 22	*Per month* 100.00	*Per month* 109.00	[2]	48
Detroit, Mich., and vicinity:		*Per hour*	*Per hour*		
Coal drivers	Dec. 8	.50	.70	48	48
Helpers, yard labor	do	.40	.55	48	48
St. Louis, Mo., packing-house drivers	Dec. 11	*Per week* 28.48	*Per week* 30.80	57	48
Clothing trades, New York, N.Y.:					
Corset and brassière workers	Dec. 7	10.00	[3] 14.00	37½	37½
Furniture workers, Richmond, Va.:		*Per hour*	*Per hour*		
Upholsterers	Nov. 18	.63	.75	45	40
Metal trades:					
Machinists:					
Akron, Ohio	Jan. —	.61– .69	.79–.82	32	40
Bridgeport, Conn.	Dec. 19	.60– .75	.70–.85	40–50	35–40
Cleveland, Ohio	Jan. 1	1.25	1.10	44–48	30–40
Indian Orchard, Mass.	Nov. 3	.47	.55	48	40
Newark, Ohio:					
Tool and die makers	Jan. 3	.50 –.65	.80	54	40
Machinists	do	.45 –.60	.73	54	40
Specialists	do	.35– .40	.60	54	40
Helpers	do	.40– .45	.58	54	40
Sioux City, Iowa	Dec. 30	.85	.72	47	24
South Brownsville, Pa.	Dec. 5	.59– .86	.81	48	40
Helpers	do	.51	.58	48	40
Molders and core makers, Trenton, N.J.	Nov. —	.40– .50	.56	50	40
Miners, Colorado:					
Outside labor:			*Per day*		
Blacksmiths	Nov. 1	[2]	$4.70	[2]	48
Blacksmiths' helpers	do	[2]	4.00	[2]	48
Electricians and mechanics	do	[2]	4.70	[2]	48
Electricians and mechanics' helpers	do	[2]	4.50	[2]	48
Hoisting engineers	do	[2]	4.70	[2]	48
Dinky and locomotive engineers	do	[2]	4.70	[2]	48
Linemen (inside and outside)	do	[2]	4.70	[2]	48

[1] Hours per day. [2] Not reported. [3] Minimum.

WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER 1933 TO FEBRUARY 1934—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Miners, Colorado—Continued.					
Outside labor—Continued.					
			Per day		
Drum runners	Nov. 1	[1]	$4.50	[1]	48
Knucklemen	do	[1]	3.90	[1]	48
Carpenters	do	[1]	4.50	[1]	48
Car repairers (mine)	do	[1]	4.05	[1]	48
Box-car loaders (lump)	do	[1]	4.00	[1]	48
Dumpers	do	[1]	4.00	[1]	48
Car droppers	do	[1]	4.00	[1]	48
Tipplemen	do	[1]	3.75	[1]	48
Slate pickers (able-bodied men)	do	[1]	3.75	[1]	48
Slate pickers (others)	do	[1]	3.30	[1]	48
Oilers	do	[1]	3.75	[1]	48
Couplers	do	[1]	3.75	[1]	48
Teamsters	do	[1]	3.75	[1]	48
Outside mine labor (unclassified)	do	[1]	3.75	[1]	48
Firemen	do	[1]	4.05	[1]	48
Hoistmen and power-house engineers	do	[1]	4.70	[1]	48
Washer operators	do	[1]	4.00	[1]	48
General utility men	do	[1]	3.99	[1]	48
Fan tenders	do	[1]	3.75	[1]	48
Combination firemen and power-house men	do	[1]	4.05	[1]	48
Boiler-house laborers	do	[1]	3.98	[1]	48
Laborers (able-bodied)	do	[1]	3.75	[1]	48
Laborers (older men and boys)	do	[1]	3.00	[1]	48
Combination lamp and power-house men	do	[1]	4.37	[1]	48
Masons	do	[1]	4.66	[1]	48
Painters	do	[1]	4.26	[1]	48
Pipemen	do	[1]	3.83	[1]	48
Sawmill men	do	[1]	3.99	[1]	48
District harness men	do	[1]	3.75	[1]	48
Assistant stable bosses	do	[1]	3.75	[1]	48
Tipple bosses	do	[1]	4.37	[1]	48
Truck drivers	do	[1]	3.83	[1]	48
Weighmen (mine cars or railroad cars)	do	[1]	4.37	[1]	48
Firemen	do	[1]	3.75	[1]	48
Inside labor:					
Bratticemen	do	[1]	4.70	[1]	48
Coal cutters, paid by day	do	[1]	5.02	[1]	48
Drivers (1 or 2 mules)	do	[1]	4.70	[1]	48
Drivers (5 or more mules)	do	[1]	4.80	[1]	48
Hoistmen	do	[1]	4.70	[1]	48
Fire bosses	do	[1]	5.62	[1]	48
Laborers	do	[1]	4.09	[1]	48
Linemen	do	[1]	4.70	[1]	48
Masons	do	[1]	4.70	[1]	48
Motormen	do	[1]	4.70	[1]	48
Nippers	do	[1]	4.70	[1]	48
Pipemen	do	[1]	4.70	[1]	48
Pumpmen	do	[1]	4.62	[1]	48
Rock dusters	do	[1]	4.70	[1]	48
Rollermen	do	[1]	4.70	[1]	48
Rope riders	do	[1]	4.70	[1]	48
Shot firers	do	[1]	5.40	[1]	48
Drillers and day workers	do	[1]	4.70	[1]	48
Driver bosses	do	[1]	4.99	[1]	48
Sprinklers	do	[1]	4.09	[1]	48
Timbermen	do	[1]	4.70	[1]	48
Timbermen's helpers	do	[1]	4.58	[1]	48
Trackmen	do	[1]	4.70	[1]	48
Trackmen's helpers	do	[1]	4.58	[1]	48
Trappers or latchmen	do	[1]	3.41	[1]	48
			Per ton		
Morley mine: Hand mining, mine run	do	[1]	.68	[1]	48
Frederick mine: Hand mining, mine run	do	[1]	.68	[1]	48
Cameron mine:					
Hand mining, mine run	do	[1]	.68	[1]	48
Machine mining, mine run, in Universal track machine district:					
Cutting and shearing	do	[1]	.058	[1]	48
Loading coal	do	[1]	.455	[1]	48
Machine mining in shortwall undercut machine district:					
Loading coal over 4 feet in thickness	do	[1]	.50	[1]	48
Loading coal under 4 feet in thickness	do	[1]	.51	[1]	48

[1] Not reported.

WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER 1933 TO FEBRUARY 1934—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Miners, Colorado—Continued.					
Kebler mine:			*Per ton*		
Hand mining, mine run	Nov. 1	[2]	$0.68	[2]	48
Loading after shortwall machines:					
Coal 4 feet or over in thickness	do	[2]	.50	[2]	48
Coal under 4 feet in thickness	do	[2]	.51	[2]	48
Nonac mine:					
Hand mining, mine run	do	[2]	.68	[2]	48
Loading after shortwall machine	do	[2]	.55	[2]	48
Crested Butte mine:					
Hand mining, mine run, where thickness of seam is—					
10 feet or over	do	[2]	.62	[2]	48
7 and less than 10 feet	do	[2]	.65	[2]	48
Less than 7 feet	do	[2]	.68	[2]	48
Loading after shortwall machines:					
Coal over 4 feet in thickness	do	[2]	.50	[2]	48
Coal 4 feet and under in thickness	do	[2]	.51	[2]	48
Motion-picture operators and stage employees:					
Motion-picture operators:		*Per week*	*Per week*		
Butler, Pa	Jan. 1	$52.00	33.75	42	36
Eau Claire, Wis	Jan. 14	25.00	28.75	30	30
Fairmont, W.Va	Dec. 12	42.00–50.00	34.00–37.00	48	40
Franklin, Pa	Nov. —	30.00	20.00	28½	28½
		Per hour	*Per hour*		
Indianapolis, Ind	Dec. 1	1.07–1.25	1.18–1.37	30–47	30–40
		Per week	*Per week*		
Jackson, Miss	Jan. 15	25.00	30.00	[2]	[2]
Joplin, Mo	Dec. 1	58.00	50.00	35	35
		Per hour	*Per hour*		
Mobile, Ala	Nov. 27	1.43	1.12½–1.25	35	40
St. Cloud, Minn	Jan. 4	1.00	.80	30	40
San Francisco, Calif	Jan. 1	2.00–2.35	1.50–2.00	36	36
		Per week	*Per week*		
Washington, Pa	Nov. —	51.25	43.33	40	40
Stage employees:					
Binghamton, N.Y	Dec. 12	55.00–57.50	47.15–50.00	48	48
Butler, Pa	Jan. 1	48.00	42.00	48	48
Knoxville, Tenn	Dec. 7	40.00–70.00	30.00–50.00	48	40–48
San Diego, Calif	Jan. 25	54.00	50.00	48	40
Paper and paper-goods workers:					
Deferiet, N.Y.:		*Per hour*	*Per hour*		
Common labor	Nov. 27	[3] .35	[3] .40	48	40
Other employees	do	[2]	[4]	48	40
Pejepscot, Maine:					
Paper mill:					
Beater room:					
Beater engineers	do	.63	.68	48	40
Beater helpers	do	.38	.41	48	40
Machine room:					
Machine tenders	do	.75–.81	.82–.88	48	40
Back tenders	do	.61–.67	.66–.73	48	40
Third hands	do	.56–.57	.60–.63	48	40
Fourth hands	do	.38	.41	48	40
Fifth hands	do	.37	.40	48	40
Brokemen	do	.36	.40	48	40
Oilers	do	.38	.41	48	40
First swipers	do	.40	.43	48	40
Second swipers	do	.37	.40	48	40
Coremen	do	.35	.40	48	40
Finishing (rolls):					
Foremen	do	.55	.59	48	40
Assistant foremen	do	.42	.45	48	40
Finishers	do	.40	.42	48	40
Pulp mill—ground wood:					
Wood preparing:					
Slipmen	do	.35	.40	48	40
Woodroom tenders	do	.37	.40	48	40
Grinder room:					
Foremen	do	.52	.56	48	40
Splitter men	do	.37	.40	48	40
Grinder men	do	.40	.43	48	40
Woodbox men	do	.37	.40	48	40
Oilers	do	.37	.40	48	40
Ground-wood testers	do	.45	.48	48	40

[2] Not reported. [3] Minimum. [4] 5 percent increase.

WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER 1933 TO FEBRUARY 1934—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Paper and paper-goods workers—Continued.					
Pejepscot, Maine—Continued.					
Pulp mill—ground wood—Continued.					
Wet room:		*Per hour*	*Per hour*		
Foremen	Nov. 27	$0.52	$0.56	48	40
Machine men	do	.39	.42	48	40
Floormen	do	.37	.40	48	40
Pushmen	do	.35	.40	48	40
Steam power:					
Steam engines:					
Head engineers	do	.63	.68	48	40
Engineers	do	.56	.60	48	40
Oilers	do	.37	.41	48	40
Stirling operators	do	.54	.58	48	40
Derrick men	do	.47	.50	48	40
Hopper men	do	.37	.40	48	40
Miscellaneous:					
Yard and miscellaneous:					
Foremen	do	.51	.55	48	40
Assistants	do	.37	.40	48	40
Yardmen	do	.35	.40	48	40
Watchmen	do	.39	.42	48	40
River and tumbler plant:					
Foremen	do	.44	.47	48	40
Boatmen	do	.37	.40	48	40
Tumbler plant:					
Sawyers	do	.47	.51	48	40
Sorters	do	.35	.40	48	40
Slipmen	do	.35	.40	48	40
Unloading crew, special for wood only	do	.37	.40	48	40
Head slipmen	do	.37	.40	48	40
Repairs:					
Machine-shop foremen	do	.62	.67	48	40
Roll grinders	do	.61	.66	48	40
Machinists	do	.56	.61	48	40
Mechanics	do	.55	.59	48	40
Helpers, first-class	do	.47	.50	48	40
Helpers, second-class	do	.43	.46	48	40
Helpers, third-class	do	.39	.42	48	40
Head electricians	do	.55	.59	48	40
Motormen	do	.46	.49	48	40
Pottery workers, East Liverpool, Ohio:					
Porcelain pressing and finishing:					
Males	Jan. 1	.40–.50	.60–.65	52	36
Females	do	.25–.30	.32–.35	52	36
Printing and publishing trades:					
Compositors and machine operators:					
Long Beach, Calif.:		*Per week*	*Per week*		
Newspaper, day	Nov. 11	41.00	45.00	41	41
Newspaper, night	do	44.00	48.00	41	41
Street-railway workers:					
St. Louis, Mo.:		*Per hour*	*Per hour*		
One man double deck bus drivers	Feb. 1	.70	.65	52	52
Two man double deck bus drivers	do	.65	.60	52	52
Conductors while driving	do	.60	.65	52	52
Shreveport, La	Jan. 11	.35–.45	.35–.50	50–60	48–54
		Per week	*Per week*		
Textile workers, silk, Philadelphia, Pa	Nov. 16	13.00–18.00	14.00–[illegible]	50¾	40
Textile workers, full-fashioned hosiery, United States:					
Skein winders and cone winders	Nov. 15	[2]	[3] 18.90	[2]	40
Leggers—standard, 18-section machine, 6 carriers, 52 courses per minute:					
39 gage:			*Per doz. pr.*		
Silk to welt, 6-12-thread, 1,300–1,350 courses	do	[2]	.6887	[2]	40
All silk or cotton back welt, 6-12-thread, 1,350–1,400 courses	do	[2]	.7293	[2]	40
Silk to welt, 5-thread, 1,400–1,450 courses	do	[2]	.7293	[2]	40
All silk or cotton back welt, 5-thread, 1,450–1,500 courses	do	[2]	.7700	[2]	40
Silk to welt, 4-thread, 1,400–1,450 courses	do	[2]	.7700	[2]	40
All silk or cotton back welt, 4-thread, 1,450–1,500 courses	do	[2]	.8106	[2]	40

[2] Not reported.

[3] Minimum.

WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER 1933 TO FEBRUARY 1934—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Textile workers, full-fashioned hosiery, United States—Continued.					
Leggers—standard—Continued.					
42 gage:					
Silk to welt, 6-11-thread, 1,350-1,400 courses	Nov. 15	[1]	*Per doz. pr.* $0.7293	[1]	40
All silk or cotton back welt, 6-11-thread, 1,400-1,450 courses	do	[1]	.7700	[1]	40
Silk to welt, 5-thread, 1,450-1,500 courses	do	[1]	.7700	[1]	40
All silk or cotton back welt, 5-thread, 1,500-1,550 courses	do	[1]	.8106	[1]	40
Silk to welt, 4-thread, 1,450-1,500 courses	do	[1]	.8106	[1]	40
All silk or cotton back welt, 4-thread, 1,500-1,550 courses	do	[1]	.8512	[1]	40
45 gage:					
Silk to welt, 6-9-thread, 1,400-1,450 courses	do	[1]	.7902	[1]	40
All silk or cotton back welt, 6-9-thread, 1,450-1,500 courses	do	[1]	.8308	[1]	40
Silk to welt, 4- and 5- thread, 1,500-1,550 courses	do	[1]	.8308	[1]	40
All silk or cotton back welt, 4- and 5-thread 1,550-1,600 courses	do	[1]	.8715	[1]	40
All silk or cotton back welt, 3-thread, 1,550-1,600 courses	do	[1]	.9121	[1]	40
48 gage:					
All silk or cotton back welt, 6- and 7-thread, 1,550-1,600 courses	do	[1]	.9121	[1]	40
All silk or cotton back welt, 4- and 5-thread, 1,650-1,700 courses	do	[1]	.9527	[1]	40
All silk or cotton back welt, 3-thread, 1,650-1,700 courses	do	[1]	.9933	[1]	40
51 gage:					
All silk or cotton back welt, 6-thread, 1,600-1,650 courses	do	[1]	1.1965	[1]	40
All silk or cotton back welt, 4- and 5-thread 1,700-1,750 courses	do	[1]	1.2371	[1]	40
All silk or cotton back welt, 3-thread, 1,700-1,750 courses	do	[1]	1.2777	[1]	40
Footers, standard, 20-section, 4 carriers, 52 courses per minute, cotton sole and toe:					
39 gage:					
6-12-thread	do	[1]	.2231	[1]	40
5-thread	do	[1]	.2346	[1]	40
4-thread	do	[1]	.2460	[1]	40
42 gage:					
6-11-thread	do	[1]	.2460	[1]	40
5-thread	do	[1]	.2575	[1]	40
4-thread	do	[1]	.2690	[1]	40
3-thread	do	[1]	.2804	[1]	40
45 gage:					
6-9-thread	do	[1]	.2804	[1]	40
4- and 5-thread	do	[1]	.2919	[1]	40
3-thread	do	[1]	.3034	[1]	40
48 gage:					
6- and 7-thread	do	[1]	.3262	[1]	40
4- and 5-thread	do	[1]	.3377	[1]	40
3-thread	do	[1]	.3491	[1]	40
51 gage:					
6-thread	do	[1]	.3950	[1]	40
4- and 5-thread	do	[1]	.4065	[1]	40
3-thread	do	[1]	.4178	[1]	40
Helpers (Long section footers):					
24 section:					
Up to 52 courses per minute, inclusive	do	[1]	.0750	[1]	40
56 courses per minute, inclusive	do	[1]	.0702	[1]	40
60 courses per minute, inclusive	do	[1]	.0656	[1]	40
64 courses per minute, inclusive	do	[1]	.0608	[1]	40
28 section:					
Up to 52 courses per minute, inclusive	do	[1]	.0702	[1]	40
56 courses per minute, inclusive	do	[1]	.0656	[1]	40
60 courses per minute, inclusive	do	[1]	.0607	[1]	40
64 courses per minute, inclusive	do	[1]	.0562	[1]	40
Toppers:					
39 gage, 6-12-thread silk or split foot	do	[1]	.2600	[1]	40
39 gage, 6-12-thread plaited foot (regular speed)	do	[1]	.2621	[1]	40

[1] Not reported.

WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER 1933 TO FEBRUARY 1934—Continued

Industry or occupation and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Textile workers, full-fashioned hosiery, United States—Continued.					
Toppers—Continued.			*Per doz. pr.*		
39 gage, 6–12-thread plaited foot (slow speed)	Nov. 15	[1]	$0.2643	[1]	40
4- and 5-thread (extra above standard)	do	[1]	.0218	[1]	40
3-thread (extra above 4-thread)	do	[1]	.0043	[1]	40
2-thread (extra above 3-thread)	do	[1]	.0262	[1]	40
42 gage (extra above 39 gage)	do	[1]	.0175	[1]	40
45 gage (extra above 42 gage)	do	[1]	.0175	[1]	40
48 gage (extra above 45 gage)	do	[1]	.0437	[1]	40
51 gage (extra above 48 gage)	do	[1]	.0700	[1]	40
Lace clox (extra)	do	[1]	.0525	[1]	40
Net mesh or fish net	do	[1]	.1050	[1]	40
Designs of more than 175 dips when topped on plain course for each 12 dips	do	[1]	.0031	[1]	40
When topped in lace	do	[1]	.0062	[1]	40
Ingrain	do	[1]	.0850	[1]	40
Boiled-off silk	do	[1]	.0425	[1]	40
Out-size feet (sizes over 10½)	do	[1]	.0069	[1]	40
Looping:					
39 gage, 20–22–24-point	do	[1]	.1256	[1]	40
42 gage, 22–24–26-point	do	[1]	.1340	[1]	40
45 gage, 24–26–28-point	do	[1]	.1423	[1]	40
48 gage, 26–28–30-point	do	[1]	.1507	[1]	40
51 gage, 28–30–32-point	do	[1]	.1926	[1]	40
For looping on points other than specified by gage extra above the gage rate	do	[1]	.0050	[1]	40
Hand raveling	do	[1]	.0251	[1]	40
Ingrain	do	[1]	.0835	[1]	40
Hand raveling on ingrain	do	[1]	.0125	[1]	40
Boiled-off silk	do	[1]	.0418	[1]	40
Seamers:					
6–12-thread	do	[1]	.1412	[1]	40
5-thread	do	[1]	.1543	[1]	40
4-thread	do	[1]	.1675	[1]	40
3-thread	do	[1]	.1850	[1]	40
2-thread	do	[1]	.2287	[1]	40
Pointed heels	do	[1]	.0087	[1]	40
Stripe and/or picot	do	[1]	.0087	[1]	40
Each additional stripe in leg ½ inch or more from joining of welt	do	[1]	.0087	[1]	40
Net, mesh or fish net	do	[1]	.0262	[1]	40
Ingrain	do	[1]	.0900	[1]	40
Boiled-off silk	do	[1]	.0450	[1]	40
Needlepoint mesh—1 side dipping	do	[1]	.0125	[1]	40
Gray examiners:					
Excluding turning	do	[1]	.0525	[1]	40
Including turning	do	[1]	.0587	[1]	40
Boarders:					
7–12-thread metal forms	do	[1]	.1225	[1]	40
4–5–6-thread metal forms	do	[1]	.1356	[1]	40
7–12-thread wooden forms	do	[1]	.1312	[1]	40
4–5–6-thread wooden forms	do	[1]	.1443	[1]	40
7–12-thread proctor machines	do	[1]	.0700	[1]	40
4–5–6-thread proctor machines	do	[1]	.0743	[1]	40
Extra for picot edge (forms)	do	[1]	.0087	[1]	40
Extra for picot edge (machines)	do	[1]	.0043	[1]	40
Extra for 3-thread (forms)	do	[1]	.0175	[1]	40
Extra for 3-thread (machines)	do	[1]	.0087	[1]	40
2-thread above 3-thread (forms)	do	[1]	.0175	[1]	40
2-thread above 3-thread (machines)	do	[1]	.0087	[1]	40
1-thread above 2-thread (forms)	do	[1]	.0350	[1]	40
1-thread above 2-thread (machines)	do	[1]	.0175	[1]	40
Pairers:					
Selecting and pairing perfects, irregulars, and seconds and segregating mends, redyes and thirds	do	[1]	.0481	[1]	40
When required to lift hose to light for defects	do	[1]	.0125	[1]	40
Extra for ingrain	do	[1]	.0100	[1]	40
Folders:					
Excluding insertion in envelops or folders	do	[1]	.0175	[1]	40
Including insertion in glassine envelops, folders, tissue wraps, or card-board insertion	do	[1]	.0218	[1]	40
Including insertion in cellophane envelops or folders	do	[1]	.0262	[1]	40
Municipal employees, Reno, Nev	Dec. 1	[1]	[2]	48	48

[1] Not reported.

[2] 10 percent increase.

Farm Wage and Labor Situation on January 1, 1934

THE general level of farm wage rates declined about 6 percent between October 1, 1933, and January 1, 1934, according to data compiled by the United States Bureau of Agricultural Economics and issued in a press release dated January 16, 1934. This decrease, however, was only about two thirds of the usual seasonal decline at this time of year, and the general average on January 1 of 1934 was over 9 percent higher than at the beginning of 1933. In several Southeastern States there was an increase in rates during the last quarter of 1933. The rates per day without board on January 1 ranged from 70 cents in South Carolina to $2.35 in Massachusetts, the average for the country as a whole being $1.21.

The supply of workers available for hire was at the lowest level recorded by the Bureau of Agricultural Economics since November 1930, while the demand for farm labor was considerably higher than a year ago. However, the number of workers actually employed on farms on January 1, 1934, was the lowest reported during the 10 years covered by the Bureau's records. On farms of crop reporters, only 84 hired workers were employed per 100 farms on January 1 as compared with 105 workers 3 months earlier and 72 a year earlier.

Table 1 shows average farm wage rates per month and per day, with board and without board, and data on farm labor and employment in January 1934 as compared with October 1932, January and October 1933, and the annual average for the period 1910 to 1914, for the country as a whole.

TABLE 1.—FARM WAGE RATES AND EMPLOYMENT IN JANUARY 1934, AS COMPARED WITH OCTOBER 1932 AND JANUARY AND OCTOBER 1933

Item	Annual average 1910–14	October 1932	January 1933	October 1933	January 1934
Farm wage index	100	84	74	86	81
Farm wage rates:					
Per month, with board	$20.41	$17.29	$14.77	$17.19	$15.73
Per month, without board	$29.09	$26.36	$23.62	$25.89	$24.90
Per day, with board	$1.10	$0.87	$0.76	$0.91	$0.87
Per day, without board	$1.43	$1.19	$1.06	$1.25	$1.21
Supply of and demand for farm labor:					
Supply, percent of normal		123.6	127.3	111.4	108.4
Demand, do		60.8	53.8	68.1	62.7
Supply, percent of demand		203.3	236.6	163.6	172.9
Farm employment:[1]					
Family labor, persons per farm		2.31	2.11	2.25	2.09
Hired labor, do		1.09	.72	1.05	.64
Combined, do		3.40	2.83	3.30	2.73

[1] On farms of crop reporters.

Average farm wage rates per month and per day, with board and without board, on January 1, 1934, are shown in table 2, by State and geographic division.

TABLE 2.—AVERAGE FARM WAGE RATES ON JAN. 1, 1934, BY STATE

Geographical division and State	Per month		Per day	
	With board	Without board	With board	Without board
New England	$24.40	$43.96	$1.43	$2.0
Maine	22.00	36.75	1.25	1.8
New Hampshire	25.50	44.00	1.40	2.0
Vermont	21.25	35.75	1.30	1.8
Massachusetts	27.75	50.75	1.60	2.3
Rhode Island	28.50	56.75	1.65	2.2
Connecticut	24.25	48.75	1.50	2.3
Middle Atlantic	19.80	34.21	1.24	1.7
New York	19.25	34.25	1.20	1.7
New Jersey	26.50	44.00	1.55	2.1
Pennsylvania	18.50	31.25	1.20	1.6
East North Central	15.69	25.06	.94	1.3
Ohio	16.00	25.75	1.00	1.3
Indiana	16.75	25.50	.90	1.2
Illinois	17.50	25.75	.95	1.3
Michigan	14.00	24.75	.95	1.3
Wisconsin	13.25	23.25	.90	1.2
West North Central	14.13	23.08	.88	1.2
Minnesota	11.00	21.25	.85	1.2
Iowa	14.75	23.00	.90	1.2
Missouri	15.50	22.75	.80	1.0
North Dakota	10.25	21.00	.85	1.2
South Dakota	12.25	21.25	.80	1.1
Nebraska	16.50	25.75	1.00	1.4
Kansas	17.25	27.00	1.00	1.4
South Atlantic	13.38	20.02	.71	.9
Delaware	17.00	28.00	1.05	1.6
Maryland	19.50	31.00	1.05	1.4
Virginia	17.00	25.25	.85	1.1
West Virginia	17.75	26.75	.95	1.2
North Carolina	14.25	21.00	.75	.9
South Carolina	10.50	14.75	.55	.7
Georgia	9.75	14.75	.55	.7
Florida	13.50	21.25	.65	.9
East South Central	12.27	17.88	.62	.8
Kentucky	14.50	21.00	.70	.9
Tennessee	13.75	19.25	.70	.8
Alabama	10.25	15.25	.55	.7
Mississippi	10.75	16.25	.55	.8
West South Central	14.87	22.30	.78	1.0
Arkansas	12.75	18.75	.60	.8
Louisiana	13.50	19.25	.75	.9
Oklahoma	15.00	24.25	.85	1.1
Texas	16.25	24.25	.85	1.1
Mountain	23.03	34.54	1.13	1.5
Montana	20.00	33.75	1.15	1.7
Idaho	23.75	33.75	1.20	1.6
Wyoming	23.00	35.75	1.15	1.7
Colorado	19.25	31.25	1.00	1.5
New Mexico	19.75	30.25	.95	1.3
Arizona	29.00	38.00	1.20	1.4
Utah	30.50	43.50	1.45	1.8
Nevada	30.00	43.25	1.20	1.8
Pacific	25.87	45.68	1.30	2.0
Washington	19.25	37.25	1.25	1.9
Oregon	19.25	35.75	1.10	1.6
California	29.00	50.00	1.35	2.1

Average Weekly Earnings in New York State Factories, June 1914 to December 1933

THE average weekly earnings of office and shop employees in representative factories in New York State from June 1914 to December 1933 are shown, by months, in the following table reproduced from the January 1934 issue of the Industrial Bulletin of the State department of labor.

VERAGE WEEKLY EARNINGS IN REPRESENTATIVE NEW YORK STATE FACTORIES

ncludes all employees in both office and shop. The average weekly earnings are obtained by dividing the total weekly pay roll by the total number of employees on the pay roll for the given week. Reports cover the week including the 15th of the month.]

Year	Average for year	January	February	March	April	May	June	July	August	September	October	November	December
914							$12.70	$12.54	$12.53	$12.48	$12.26	$12.32	$12.56
915	$12.85	$12.44	$12.41	$12.65	$12.54	$12.74	12.81	12.66	12.89	12.86	13.30	13.45	13.49
916	14.43	13.53	13.77	13.96	14.15	14.24	14.41	14.11	14.44	14.87	14.95	15.16	15.51
917	16.37	15.28	15.31	15.79	15.50	16.08	16.20	16.17	16.44	16.97	17.33	17.69	17.71
918	20.35	16.81	17.66	18.71	19.25	19.91	20.44	20.78	21.23	22.31	22.34	21.60	23.18
919	23.50	23.03	22.07	22.20	22.11	22.23	22.51	23.10	23.85	24.83	24.41	25.37	26.32
920	28.15	26.52	26.47	27.87	27.80	28.45	28.77	28.49	28.71	28.73	28.93	28.70	28.35
921	25.72	27.61	26.77	26.97	26.20	25.86	25.71	25.26	25.43	25.07	24.53	24.32	24.91
922	25.04	24.43	24.17	24.57	24.15	24.59	24.91	24.77	25.10	25.71	25.61	26.04	26.39
923	27.24	26.21	25.87	26.92	27.00	27.63	27.87	27.54	27.12	27.41	27.72	27.64	27.98
924	27.68	27.81	27.73	28.16	27.70	27.56	27.21	27.06	27.40	28.05	27.53	27.66	28.25
925	28.26	28.30	27.96	28.45	27.67	28.07	27.94	27.98	28.16	28.33	28.57	28.67	29.05
926	29.02	29.05	28.61	29.04	28.85	28.69	28.99	28.81	28.86	29.31	29.35	29.15	29.47
927	29.30	29.52	29.39	29.78	29.17	29.18	29.17	28.95	29.29	29.57	29.28	28.75	29.57
928	29.44	29.21	29.16	29.64	28.79	29.19	29.48	29.15	29.38	29.72	29.78	29.62	30.12
929	29.99	29.71	29.99	30.35	30.07	30.03	30.02	29.80	30.09	30.47	30.08	29.54	29.75
930	28.81	29.80	29.46	29.90	29.44	29.10	28.96	28.50	28.59	28.94	28.03	27.42	27.52
931	26.42	27.01	27.44	27.96	27.35	26.96	26.34	26.39	26.33	26.16	25.34	24.99	24.74
932	22.73	24.35	24.02	24.14	23.36	22.59	22.20	21.82	21.92	22.50	22.55	21.74	21.62
933	21.83	20.96	20.95	20.73	21.02	21.49	21.95	22.34	22.48	22.87	22.52	22.25	22.43

Wage Increases in the Far-Eastern Territory of the Soviet Union [1]

IN THE far-eastern territory of the Soviet Union (U.S.S.R.) including the farthest parts of eastern Siberia, Maritime Province, and the Russian part of the Sakhalin Island, the people are engaged in farming, fisheries, mining, and other industrial and commercial pursuits. They live and work under certain hardships, such as lack of suitable means of transportation and communication and nearby markets, their remoteness from civilized centers, etc. In order to improve and strengthen their economic position the Government of the Soviet Union issued a decree on December 11, 1933, providing for an increase of wages and salaries of workers and for a temporary suspension of taxes.[1] The provisions went into effect January 1, 1934.

Beginning with that date, the collective farms (*Kolkhozy*) and the individual farms are exempted for a period of 10 and 5 years, respectively, from the compulsory delivery of certain commodities to the State. Thus these farms in the entire far-eastern territory are exempted from the delivery of grain and rice and those in the districts of Ternei, Soviet, and Olgin in the Maritime Province, in the districts of Komsomolsk, lower Amur, Okhotsk-Evensk, Koryak, and Okhotsk in the Sakhalin, and Kamchatsk Provinces are to be exempted from the delivery of meat, potatoes, sunflower seeds, wool, milk, and butter and also from contracts for the delivery of soybeans, vegetables, and flax; in the districts of Birohidzhansk and Prigorod in the Maritime Province the required amounts of these commodities are reduced 50 percent.

[1] Data are from Soviet Union (U.S.S.R.), Central Executive Committee of the Soviet Union, Izvestia-issues of Dec. 12 and 15, 1933.

For the entire far-eastern territory, the price fixed by the State f raw fish to be delivered to the State by the collective farms is increase 20 percent.

Wages paid to certain classes of workers in the entire far-easter territory are increased as follows: (*a*) Wage earners and engineering technical personnel engaged in coal mining, 30 percent; (*b*) wag earners and engineering-technical personnel engaged in factories transport and communication, industries, soviet farms (*Sovkhozy* and tractor stations, and teachers, political educators, medical per sonnel, agriculturists, veterinarians, agricultural technicians, and lan surveyors, 20 percent; and (*c*) salaried employees in offices, etc., 1 percent. The pay in the army units located in the Far East is als increased by the following amounts: (*a*) Soldiers and officers in th lower grades, 50 percent; and (*b*) older officers and those in the middl and higher grades, 20 percent.

It is reported that the population of the far-eastern territory has received the decree with satisfaction. Mass meetings in the indus trial and commercial establishments in the city of Vladivostok com mended the decree and expressed the desire of the meetings to do their full part in the industrialization of the territory. The wage earners and technicians sent to the territory from the European Russians pledged themselves to stay and work there till the completion of the second 5-year plan. The Vladivostok units of the boundary guard declared that they will increase their efforts for the defense of the boundaries of the territory and for the protection of the workers therein.

TREND OF EMPLOYMENT

THE Bureau of Labor Statistics of the United States Department of Labor presents herewith data compiled from pay-roll reports supplied by representative establishments in 89 of the principal manufacturing industries of the country and 16 nonmanufacturing industries, covering the pay period ending nearest the 15th of the month. Additional information is presented concerning employment on public-works projects, public roads, the Federal service, and class I steam railroads.

Employment in Selected Manufacturing Industries in January 1934

Comparison of Employment and Pay-Roll Totals in January 1934 with December 1933 and January 1933

EMPLOYMENT in manufacturing industries decreased 1.1 percent in January 1934 as compared with December 1933 and pay rolls decreased 0.8 percent over the month interval. A comparison of employment in January 1934 with January 1933 shows that the employment index for January of the current year is 22.4 percent above the January 1933 employment index, while a similar comparison of the January 1934 pay-roll index with the January 1933 pay-roll index shows a gain of 38 percent in pay rolls over the year interval.

The index of employment in January 1934 was 69.3, as compared with 70.1 in December 1933, 71.4 in November 1933, and 56.6 in January 1933; the pay-roll index in January 1934 was 49.4, as compared with 49.8 in December, 50.3 in November 1933, and 35.8 in January 1933. The 12-month average for 1926 equals 100.

These changes in employment and pay rolls in January 1934 are based on reports supplied by 17,808 establishments in 89 of the principal manufacturing industries of the United States. These establishments reported 3,077,527 employees on their pay rolls during the

pay period ending nearest January 15, whose combined weekly earnings were $55,611,536. The employment reports received from these cooperating establishments cover approximately 50 percent of the total wage earners in all manufacturing industries of the United States.

Decreases in employment between December and January have been reported each year since 1923 with the exception of one year, 1925, in which a slight increase was reported, while pay-roll totals have decreased each year over this 10-year interval. The average change in employment in January over the 10-year period is a decrease of 1.4 percent and the average change in pay rolls over the same interval is a decrease of 4.6 percent. The decline in employment, therefore, between December 1933 and January 1934 is less than the average decline in the preceding 10 years and the current decrease in pay rolls is much smaller than any decline reported in January over the period 1923–1932.

This decline of 1.1 percent in factory employment indicates the release of approximately 70,000 employees from gainful employment, while the decrease of 0.8 percent in pay-roll totals is equivalent to a decline of $883,000 in weekly disbursements in January 1934 as compared with December 1933.

Comparing the index of employment in January 1934 (69.3) with the index of employment in March 1933 (55.1), which was the low point recorded in the Bureau's indexes, it is seen that employment has increased 25.8 percent over this 10-month interval. The January pay-roll index (49.4) shows an increase of 47.9 percent in pay rolls, compared with the March 1933 pay-roll index (33.4).

Twenty-six of the 89 manufacturing industries surveyed monthly by the Bureau of Labor Statistics reported increased employment in January as compared with December and 33 industries reported increased pay rolls over the month interval. Four of the 14 groups into which these manufacturing industries are classified showed gains in employment between December 1933 and January 1934. The most pronounced percentage increase over the month interval was in the transportation equipment group, in which an increase of 16.5 percent in employment was coupled with an increase of 21.4 percent in pay-roll totals. The increases in employment and pay rolls in this group were due entirely to the expansion in the automobile industry which showed a gain of 21.5 percent in employment and 26.9 percent in pay rolls between December and January. The remaining industries in the transportation equipment group (shipbuilding, steam and electric car building, locomotives, and aircraft) reported decreases in both employment and pay rolls. The leather group, due chiefly to the increase of 6.6 percent in employment in the boot and shoe industry,

reported a gain of 5.1 percent and the chemicals group reported an increase in employment of 0.7 percent over the month interval. The textile group showed an increase of 0.3 percent in employment over the month interval, pronounced seasonal gains being shown in the women's clothing and millinery industries. The woolen and worsted goods industry showed an increase of 2.4 percent and the cotton-goods industry reported an increase of 0.9 percent. The increase in the textile group was retarded to some extent by the effect of the hosiery code authority's order of December 18 curtailing hosiery-mill operations. This curtailment was reflected in the decrease of 5.2 percent in employment and 19.7 percent in pay rolls in the knit-goods industry. In the remaining 10 groups, the most pronounced percentage decline in employment (12.4 percent) was shown in the tobacco-products group. The lumber group, due to sharp decreases in the sawmill, millwork, and furniture industries, showed a decrease of 8.3 percent in the number of workers between December and January. Employment in the food group declined 5 percent over the month interval, the beet sugar and confectionery industries reporting the usual large declines at this season of the year. The iron and steel *group* reported a falling-off of 4.2 percent in employment between December and January, the largest percentage declines being reported in the plumbers' supplies, steam fittings, and stove industries. The iron and steel *industry* reported a decrease of 2.9 percent. The stone-clay-glass products group reported a decrease of 3.5 percent, the brick, marble, and cement industries in this group reporting seasonal decreases. The nonferrous metal group reported a decline of 3.2 percent and the paper and printing group reported a loss of 2.2 percent in employment. The decrease of 2.1 percent in employment in the rubber-products group was due to a pronounced decline in the rubber boot and shoe industry and smaller decreases in the rubber tire and other rubber goods industries. The machinery group reported a decline of 1.9 percent in employment over the month interval, the most pronounced decline in this group being shown in the radio and phonograph industry (17.2 percent), while the textile machinery industry reported a decrease of 5 percent in employment. The agricultural implement industry continued its steady upward trend which began in June and the machine-tool industry reported a gain of one tenth of 1 percent, which, while small, continued the gains in employment which began in May of last year. The railroad repair shop group reported a loss of 1.2 percent.

Two industries reported more than 100 percent increase over the year interval, the beverage industry, due largely to the legalization of beer manufacturing, reporting an increase of 121.7 percent in employment and the radio industry reporting an increase of 114 percent. Additional industries reporting unusually large percentage gains in

employment were as follows: Agricultural implements, 73; fertili-ers, 69.3; machine tools, 65; iron and steel forgings, 62.9; glas 56.9; typewriters and supplies, 56.4; engines, turbines, tractors, etc 55.1; and textile machinery, 51. Other large percentage gains i industries of major importance were: Chemicals, 43.9; automobile 41.1; iron and steel, 39.9; foundry and machine-shop products, 39.7 sawmills, 34.2; electrical machinery, apparatus, and supplies, 29.5 cotton goods, 29.3; and slaughtering and meat packing, 24.5. In th six industries in which decreased employment over the year interva was shown, the declines in employment were small, with the exceptio of the men's furnishing industry in which a decrease of 22.5 percen was reported.

In table 1 are shown the number of identical establishments report ing in both December 1933 and January 1934 in the 89 manufacturing industries surveyed, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest January 15, the amount of their earnings for 1 week in January the percentages of change over the month and year intervals, and the indexes of employment and pay roll in January 1934.

The monthly percentages of change for each of the 89 separate industries are computed by direct comparison of the total number of employees and of the amount of weekly pay roll reported in identical establishments for the 2 months considered. The percentages of change over the month interval in the several groups and in the total of the 89 manufacturing industries are computed from the index numbers of these groups, which are obtained by weighting the index numbers of the several industries in the groups by the number of employees or wages paid in the industries. The percentages of change over the year interval in the separate industries, in the groups, and in the totals are computed from the index numbers of employment and pay-roll totals.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN JANUARY 1934 WITH DECEMBER 1933 AND JANUARY 1933

Industry	Establishments reporting in both December and January	Employment			Pay-roll totals			Index numbers January 1934 (average 1926=100)	
		Number on pay roll January 1934	Percent of change		Amount of pay roll (1 week) January 1934	Percent of change			
			December 1933 to January 1934	January 1933 to January 1934		December 1933 to January 1934	January 1933 to January 1934	Employment	Pay-roll totals
Food and kindred products	**2,987**	**273,252**	**−5.2**	**+18.7**	**$5,786,582**	**−4.3**	**+25.1**	**93.4**	**77.7**
Baking	964	64,416	−1.2	+11.1	1,411,359	−1.2	+11.8	85.9	70.9
Beverages	388	23,043	−(1)	+121.7	639,688	−2.3	+150.4	140.8	123.7
Butter	277	4,222	−2.4	+11.4	83,496	−3.7	+1.1	98.7	71.8
Confectionery	287	32,409	−12.5	+.7	506,463	−10.5	+18.3	76.8	63.9
Flour	402	16,894	+.3	+14.7	349,693	+1.6	+14.1	94.3	75.9
Ice cream	347	8,912	−1.3	+6.5	223,574	−.4	+5.3	65.3	49.6
Slaughtering and meat packing	246	104,139	−1.5	+24.5	2,234,860	−.3	+36.5	105.2	91.6
Sugar, beet	63	11,326	−50.8	+13.2	176,121	−58.8	+8.4	129.5	72.3
Sugar refining, cane	13	7,891	−3.9	+10.0	161,328	−7.0	+1.4	79.0	57.0
Textiles and their products	**3,174**	**704,124**	**+.3**	**+14.8**	**$9,896,169**	**+1.4**	**+36.3**	**79.9**	**57.5**
Fabrics	**1,936**	**586,343**	**−.2**	**+19.3**	**$8,039,175**	**−1.5**	**+40.3**	**86.5**	**64.8**
Carpets and rugs	27	16,405	−2.2	+36.9	282,658	+2.9	+85.6	70.1	50.1
Cotton goods	693	301,337	+.9	+29.3	3,809,636	+3.3	+64.5	96.7	79.6
Cotton small wares	109	9,102	−1.6	+10.8	140,047	+1.2	+28.1	84.2	65.1
Dyeing and finishing textiles	147	38,695	−.7	+17.3	679,300	−2.4	+22.7	90.7	64.4
Hats, fur-felt	33	5,735	+4.7	+11.9	108,633	+2.9	+20.1	72.6	46.6
Knit goods	440	103,780	−5.2	+3.8	1,295,820	−19.7	+10.3	82.3	53.4
Silk and rayon goods	243	46,414	+(1)	+3.2	646,582	+.8	+27.9	61.6	45.8
Woolen and worsted goods	244	64,875	+2.4	+21.7	1,076,499	+2.1	+33.9	86.9	66.8
Wearing apparel	**1,238**	**117,781**	**+1.6**	**+1.7**	**1,856,994**	**+11.3**	**+25.6**	**64.0**	**43.2**
Clothing, men's	392	60,485	+.3	+8.4	937,725	+9.8	+37.7	67.3	43.1
Clothing, women's	503	26,101	+9.2	−2.8	486,594	+18.9	+22.4	61.8	42.6
Corsets and allied garments	31	5,446	−1.5	−.7	82,422	+8.2	+14.1	95.9	78.3
Men's furnishings	69	5,217	−9.9	−22.5	59,812	−15.4	−11.2	47.8	28.5
Millinery	126	7,434	+10.6	+1.8	136,719	+22.9	+8.5	66.1	43.2
Shirts and collars	117	13,098	−13.0	+2.2	153,722	−12.4	+37.4	54.6	41.5
Iron and steel and their products, not including machinery	**1,341**	**378,544**	**−4.2**	**+36.5**	**6,542,433**	**−5.5**	**+81.0**	**66.9**	**40.9**
Bolts, nuts, washers, and rivets	53	8,085	−4.9	+31.4	138,113	−4.2	+70.2	78.7	52.6
Cast iron pipe	44	7,487	+7.7	+39.3	108,547	+1.5	+74.0	37.6	22.8
Cutlery (not including silver and plated cutlery) and edge tools	132	10,606	−7.5	+22.8	195,207	−11.2	+38.8	71.0	49.0
Forgings, iron and steel	65	7,928	+2.1	+62.9	155,040	+2.7	+116.3	86.2	58.4
Hardware	81	30,250	+13.0	+35.6	514,339	+10.1	+73.7	65.5	38.9
Iron and steel	208	232,110	−2.9	+39.9	3,989,163	−4.3	+98.6	70.8	42.5
Plumbers' supplies	71	5,773	−24.2	+12.7	79,698	−28.6	+25.4	49.7	24.2
Steam and hot-water heating apparatus and steam fittings	88	18,671	−19.2	+13.1	359,066	−16.1	+40.1	35.4	23.4
Stoves	160	18,013	−17.9	+47.6	286,460	−22.4	+64.9	55.8	30.5
Structural and ornamental metalwork	198	15,200	−2.2	+26.8	261,421	−6.6	+58.9	48.3	29.4
Tin cans and other tinware	56	8,349	−8.5	+18.2	158,690	−12.8	+21.6	80.0	48.4
Tools (not including edge tools, machine tools, files, and saws)	114	8,448	+.3	+40.4	153,857	+.2	+65.5	83.4	54.6
Wirework	71	7,624	+.7	+46.3	142,832	+.1	+96.8	123.9	99.6

[1] Less than one tenth of 1 percent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN JANUARY 1934 WITH DECEMBER 1933 AND JANUARY 1933—Continued

Industry	Establishments reporting in both December and January	Employment			Pay-roll totals			Index numbers January 1934 (average 1926=100)	
		Number on pay roll January 1934	Percent of change		Amount of pay roll (1 week) January 1934	Percent of change		Employment	Pay-roll totals
			December 1933 to January 1934	January 1933 to January 1934		December 1933 to January 1934	January 1933 to January 1934		
Machinery, not including transportation equipment	**1,739**	**323,477**	**−1.9**	**+42.6**	**$6,214,419**	**−2.8**	**+66.8**	61.9	41.7
Agricultural implements	77	11,251	+7.4	+73.0	215,729	+9.0	+126.5	47.4	42.8
Cash registers, adding machines, and calculating machines	26	14,729	+1.6	+42.4	371,423	+1.0	+69.7	88.6	72.8
Electrical machinery, apparatus, and supplies	280	96,897	−2.7	+29.5	1,773,361	−3.9	+41.6	60.1	43.2
Engines, turbines, tractors, and water wheels	88	22,950	+.7	+55.1	498,514	−.7	+74.5	61.9	42.4
Foundry and machine-shop products	1,015	110,878	−.3	+39.7	2,076,871	+.1	+72.7	58.1	36.1
Machine tools	154	16,041	+.1	+65.0	342,591	−1.2	+90.3	52.3	37.3
Radios and phonographs	34	27,725	−17.2	+114.0	474,854	−25.9	+99.3	123.9	83.5
Textile machinery and parts	53	10,339	−5.0	+51.0	218,237	−5.2	+81.1	82.3	61.2
Typewriters and supplies	12	12,667	+(1)	+56.4	242,839	−5.5	+105.2	89.8	67.1
Nonferrous metals and their products	**32**	**99,506**	**−3.2**	**+30.7**	**1,782,885**	**−5.6**	**+52.8**	65.5	45.7
Aluminum manufactures	23	5,936	−3.6	+28.4	91,514	−12.9	+27.5	60.1	35.7
Brass, bronze, and copper products	214	37,229	−1.6	+36.0	704,794	−1.6	+67.9	66.1	45.5
Clocks and watches and time-recording devices	25	8,363	−2.2	+20.2	137,374	−10.2	+51.3	47.0	34.8
Jewelry	121	7,043	−6.9	+14.8	125,999	−14.2	+23.9	37.9	25.9
Lighting equipment	51	3,302	−4.5	+30.0	58,683	−10.5	+34.8	81.4	57.3
Silverware and plated ware	58	8,519	−4.6	+32.7	157,507	−11.1	+56.7	73.1	47.0
Smelting and refining—copper, lead, and zinc	39	13,264	−1.1	+41.9	249,744	+4.2	+46.7	83.3	54.0
Stamped and enameled ware	101	15,850	−7.0	+18.2	257,270	−6.7	+55.2	64.8	47.8
Transportation equipment	**406**	**303,726**	**+16.5**	**+38.2**	**6,311,478**	**+21.4**	**+47.8**	68.4	50.4
Aircraft	23	7,642	−(1)	+42.3	188,556	−.5	+26.9	259.9	229.8
Automobiles	221	254,587	+21.5	+41.1	5,270,119	+26.9	+51.6	72.8	53.5
Cars, electric- and steam-railroad	51	9,718	−.9	+34.4	167,568	−4.7	+35.0	24.2	13.5
Locomotives	11	2,489	−4.2	+40.9	47,056	−3.9	+39.8	17.9	11.6
Shipbuilding	100	29,290	−4.3	+18.8	638,179	−2.5	+27.9	77.2	58.6
Railroad repair shops	**899**	**88,285**	**−1.2**	**+2.1**	**2,011,944**	**−5.6**	**+7.8**	49.1	38.6
Electric railroad	366	18,830	−1.2	−3.5	477,777	−2.3	−3.4	63.3	51.1
Steam railroad	533	69,455	−1.3	+2.8	1,534,167	−6.0	+9.0	48.0	37.6
Lumber and allied products	**1,548**	**133,303**	**−8.3**	**+26.8**	**1,765,258**	**−11.6**	**+49.1**	43.0	24.3
Furniture	448	45,598	−8.9	+16.1	617,984	−12.1	+34.8	49.0	26.7
Lumber:									
Millwork	478	18,661	−8.2	+14.1	263,294	−10.3	+27.2	34.7	20.6
Sawmills	603	67,581	−7.8	+34.2	863,520	−12.7	+65.7	41.6	23.2
Turpentine and rosin	19	1,463	−9.2	+39.8	20,460	+3.2	+58.2	60.8	58.2
Stone, clay, and glass products	**1,254**	**95,055**	**−3.5**	**+33.9**	**1,593,933**	**−4.0**	**+44.3**	47.4	29.0
Brick, tile, and terra cotta	637	15,635	−8.7	+27.6	203,567	−4.4	+54.5	24.5	11.9
Cement	121	9,495	−2.8	+8.7	164,507	+1.7	+19.3	32.6	17.9
Glass	176	48,055	+1.1	+56.9	878,710	+1.5	+67.8	83.3	61.4
Marble, granite, slate, and other products	208	4,342	−10.6	+5.4	67,397	−22.5	−18.2	35.4	17.1
Pottery	112	17,528	−3.8	+30.3	279,752	−7.8	+53.4	71.4	43.1
Leather and its manufactures	**456**	**135,436**	**+5.1**	**+8.1**	**2,326,273**	**+10.1**	**+37.1**	78.4	58.0
Boots and shoes	307	104,374	+6.6	+3.1	1,713,419	+15.1	+33.7	75.4	53.6
Leather	149	31,062	+.7	+29.1	612,854	−1.2	+46.3	90.5	73.3

[1] Less than one tenth of 1 percent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING ESTABLISHMENTS IN JANUARYS 1934 WITH DECEMBER 1933 AND JANUARY 1933—Continued

Industry	Establishments reporting in both December and January	Employment			Pay-roll totals			Index numbers January 1934 (average 1926=100)	
		Number on pay roll January 1934	Percent of change		Amount of pay roll (1 week) January 1934	Percent of change		Employment	Pay-roll totals
			December 1933 to January 1934	January 1933 to January 1934		December 1933 to January 1934	January 1933 to January 1934		
Paper and printing	**1,938**	**229,816**	**−2.2**	**+13.2**	**$5,208,401**	**−3.9**	**+10.8**	**88.5**	**69.0**
Boxes, paper	319	23,852	−5.9	+16.9	406,834	−7.8	+24.5	78.7	64.0
Paper and pulp	424	100,710	−.8	+26.5	1,778,621	−.8	+35.3	91.3	60.9
Printing and publishing:									
Book and job	744	46,836	−1.6	+6.1	1,185,187	−2.6	+6.1	76.1	61.1
Newspapers and periodicals	451	58,418	−2.8	+7.4	1,837,759	−5.6	+1.8	104.3	84.1
Chemicals and allied products	**1,068**	**180,956**	**+.7**	**+30.3**	**3,864,402**	**−.3**	**+29.4**	**98.0**	**77.0**
Chemicals	110	27,737	+1.3	+43.9	645,539	+.4	+46.0	122.9	88.2
Cottonseed — oil, cake, and meal	107	4,889	−10.5	+27.9	49,612	−7.8	+32.3	46.8	43.8
Druggists' preparations	56	8,083	−1.1	+11.6	154,320	−2.2	+10.6	82.5	80.2
Explosives	30	4,286	−.4	+35.6	87,475	+2.7	+55.2	102.9	72.3
Fertilizers	166	9,333	+12.5	+69.3	113,937	+12.3	+66.2	84.5	54.0
Paints and varnishes	324	15,643	+4.2	+26.1	322,092	+4.0	+34.6	80.2	61.8
Petroleum refining	148	62,454	−.8	+18.5	1,603,978	+.1	+12.4	73.6	59.9
Rayon and allied products	23	33,938	−.8	+27.5	588,814	−5.8	+33.1	190.3	164.4
Soap	104	14,593	−1.6	+11.7	298,635	−.9	+13.5	105.2	87.4
Rubber products	**139**	**85,403**	**−2.1**	**+33.1**	**1,708,499**	**−.5**	**+60.9**	**82.8**	**58.9**
Rubber boots and shoes	9	13,304	−8.6	+25.3	227,925	−13.3	+54.6	64.4	54.9
Rubber goods, other than boots, shoes, tires, and inner tubes	92	17,828	−2.0	+30.4	308,970	+.3	+40.9	106.4	73.0
Rubber tires and inner tubes	38	54,271	−.5	+37.1	1,171,604	+2.7	+74.3	78.7	54.9
Tobacco manufactures	**227**	**46,644**	**−12.4**	**−2.4**	**598,860**	**−14.6**	**+12.0**	**60.9**	**45.8**
Chewing and smoking tobacco and snuff	31	9,861	+1.8	−.8	137,163	+3.3	+2.8	89.3	76.3
Cigars and cigarettes	196	36,783	−14.7	−2.7	461,697	−17.8	+14.1	57.3	42.1
Total, 89 industries	**17,808**	**3,077,527**	**−1.1**	**+22.4**	**$5,611,536**	**−.8**	**+38.0**	**69.3**	**49.4**

Per Capita Earnings in Manufacturing Industries

PER capita weekly earnings in January 1934 for each of the 89 manufacturing industries surveyed by the Bureau of Labor Statistics and for all industries combined, together with the percentages of change in January 1934 as compared with December 1933 and January 1933 are shown in table 2.

These earnings must not be confused with full-time weekly rates of wages. They are per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN JANUARY 1934 AND COMPARISON WITH DECEMBER 1933 AND JANUARY 1933

Industry	Per capita weekly earnings in January 1934	Percent of change, January 1934 compared with—	
		December 1933	January 1933
Food and kindred products:			
Baking	$21.91	(1)	+0.8
Beverages	27.76	−2.3	+13.1
Butter	19.78	−1.3	−9.5
Confectionery	15.63	+2.3	+17.6
Flour	20.70	+1.2	−.2
Ice cream	25.09	+1.0	−.7
Slaughtering and meat packing	21.46	+1.2	+9.5
Sugar, beet	15.55	−16.4	−4.5
Sugar refining, cane	20.44	−3.3	−7.5
Textiles and their products:			
Fabrics:			
Carpets and rugs	17.23	+5.1	+35.4
Cotton goods	12.64	+2.3	+26.5
Cotton small wares	15.39	+2.9	+15.2
Dyeing and finishing textiles	17.56	−1.7	+4.8
Hats, fur-felt	18.94	−1.7	+7.4
Knit goods	12.49	−15.2	+6.1
Silk and rayon goods	13.93	+.7	+23.5
Woolen and worsted goods	16.59	−.2	+9.5
Wearing apparel:			
Clothing, men's	15.50	+9.5	+27.0
Clothing, women's	18.64	+8.9	+26.3
Corsets and allied garments	15.13	+9.8	+15.0
Men's furnishings	11.46	−6.1	+14.6
Millinery	18.39	+11.1	+6.9
Shirts and collars	11.74	+.7	+34.8
Iron and steel and their products, not including machinery:			
Bolts, nuts, washers, and rivets	17.08	+.8	+29.7
Cast-iron pipe	14.50	−5.7	+25.6
Cutlery (not including silver and plated cutlery) and edge tools	18.41	−4.0	+12.7
Forgings, iron and steel	19.56	+.6	+32.8
Hardware	17.00	−2.6	+27.7
Iron and steel	17.19	−1.4	+42.3
Plumbers' supplies	13.81	−5.7	+11.8
Steam and hot-water heating apparatus and steam fittings	19.23	+3.7	+24.0
Stoves	15.90	−5.4	+11.7
Structural and ornamental metalwork	17.20	−4.4	+25.1
Tin cans and other tinware	19.01	−4.7	+2.9
Tools (not including edge tools, machine tools, files, and saws)	18.21	−.2	+18.0
Wirework	18.73	−.7	+34.2
Machinery, not including transportation equipment:			
Agricultural implements	19.17	+1.5	+30.4
Cash registers, adding machines, and calculating machines	25.22	−.6	+19.2
Electrical machinery, apparatus, and supplies	18.30	−1.3	+9.6
Engines, turbines, tractors, and water wheels	21.72	−1.3	+12.5
Foundry and machine-shop products	18.73	+.4	+23.9
Machine tools	21.36	−1.3	+15.4
Radios and phonographs	17.13	−10.5	−7.0
Textile machinery and parts	21.11	−.2	+19.7
Typewriters and supplies	19.17	−5.5	+31.2
Nonferrous metals and their products:			
Aluminum manufactures	15.42	−9.6	−.5
Brass, bronze, and copper products	18.93	(1)	+23.3
Clocks and watches and time-recording devices	16.43	−8.2	+25.7
Jewelry	17.89	−7.7	+7.7
Lighting equipment	17.77	−6.3	+3.4
Silverware and plated ware	18.49	−6.8	+18.3
Smelting and refining—copper, lead, and zinc	18.83	+5.4	+3.9
Stamped and enameled ware	16.23	+.4	+31.1
Transportation equipment:			
Aircraft	24.67	−.5	−10.8
Automobiles	20.70	+4.5	+7.6
Cars, electric- and steam-railroad	17.24	−3.9	+.6
Locomotives	18.91	+.4	−.8
Shipbuilding	21.79	+2.0	+7.8
Railroad repair shops:			
Electric railroad	25.37	−1.2	(1)
Steam railroad	22.09	−4.7	+5.7

[1] No change.

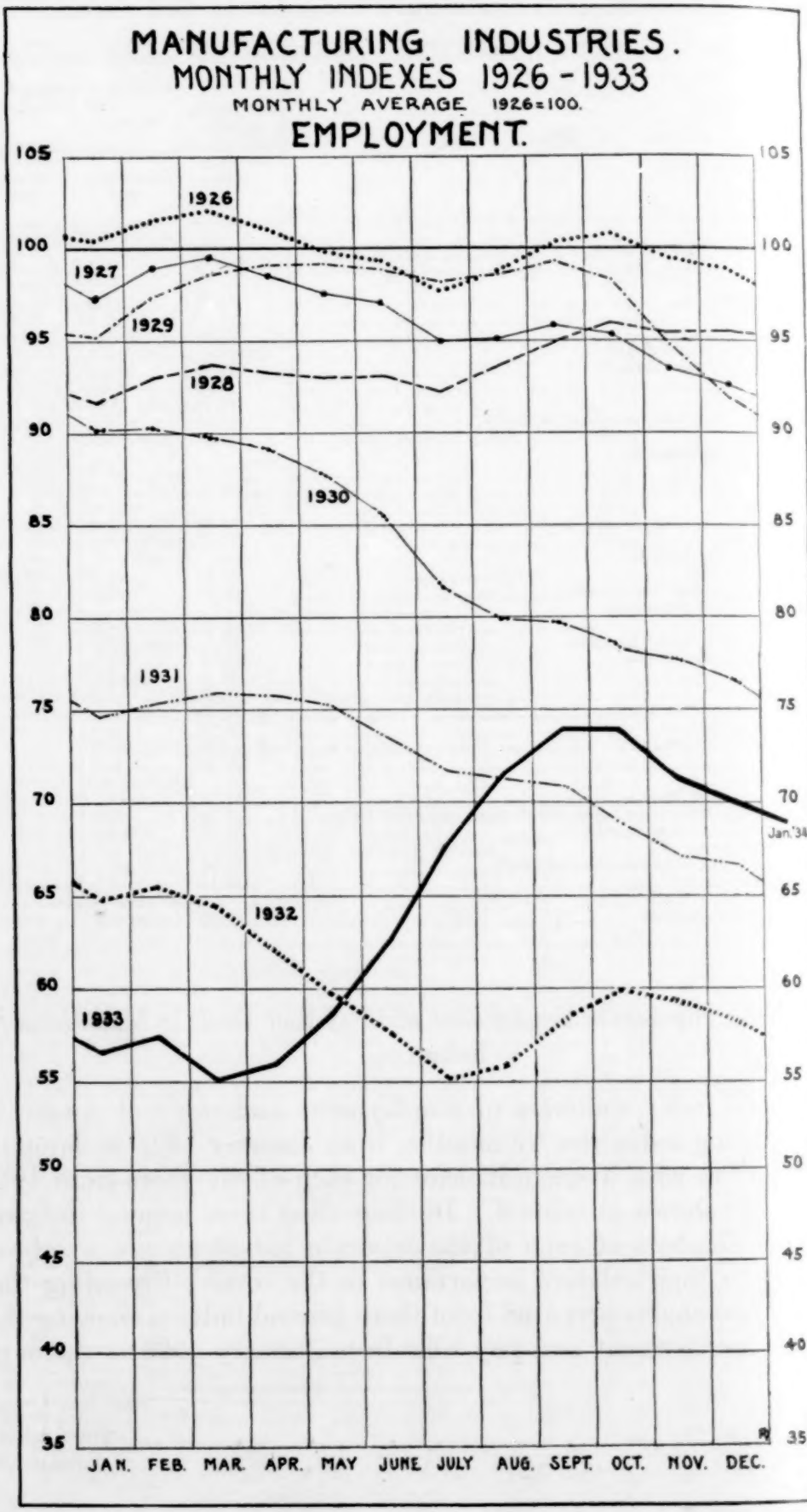
TABLE 2.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN JANUARY 1934 AND COMPARISON WITH DECEMBER 1933 AND JANUARY 1933—Continued

Industry	Per capita weekly earnings in January 1934	Percent of change, January 1934 compared with—	
		December 1933	January 1933
Lumber and allied products:			
Furniture	$13.55	−3.6	+16.4
Lumber:			
Millwork	14.11	−2.2	+11.6
Sawmills	12.78	−5.3	+23.6
Turpentine and rosin	13.98	+13.7	+13.2
Stone, clay, and glass products:			
Brick, tile, and terra cotta	13.02	+4.7	+20.6
Cement	17.33	+4.6	+9.3
Glass	18.29	+.5	+6.8
Marble, granite, slate, and other products	15.52	−13.3	−22.2
Pottery	15.96	−4.1	+17.6
Leather and its manufactures:			
Boots and shoes	16.42	+8.0	+29.5
Leather	19.73	−1.8	+13.7
Paper and printing:			
Boxes, paper	17.06	−2.0	+6.3
Paper and pulp	17.66	+.1	+7.3
Printing and publishing:			
Book and job	25.31	−1.0	+.1
Newspapers and periodicals	31.46	−2.8	−5.3
Chemicals and allied products:			
Chemicals	23.27	−.9	+1.9
Cottonseed—oil, cake, and meal	10.15	+3.0	+3.8
Druggists' preparations	19.09	−1.1	−.7
Explosives	20.41	+3.1	+14.4
Fertilizers	12.21	−.2	−1.5
Paints and varnishes	20.59	−.1	+6.5
Petroleum refining	25.68	+.9	−5.2
Rayon and allied products	17.35	−5.1	+4.2
Soap	20.46	+.7	+1.4
Rubber products:			
Rubber boots and shoes	17.13	−5.1	+23.3
Rubber goods, other than boots, shoes, tires, and inner tubes	17.33	+2.3	+8.0
Rubber tires and inner tubes	21.59	+3.2	+27.0
Tobacco manufactures:			
Chewing and smoking tobacco and snuff	13.91	+1.5	+3.6
Cigars and cigarettes	12.55	−3.7	+17.0
Average, 89 industries	18.07	[1] +.4	[2] +12.6

[1] Weighted.

General Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

GENERAL index numbers of employment and pay-roll totals in manufacturing industries by months, from January 1927 to January 1934, together with average indexes for each of the years from 1927 to 1933, are shown in table 3. In computing these general indexes, the index numbers of each of the separate industries are weighted according to their relative importance in the total. Preceding this table are two charts prepared from these general indexes showing the course of employment and pay rolls from January 1926 to January 1934.


MANUFACTURING INDUSTRIES.
MONTHLY INDEXES 1926 - 1933
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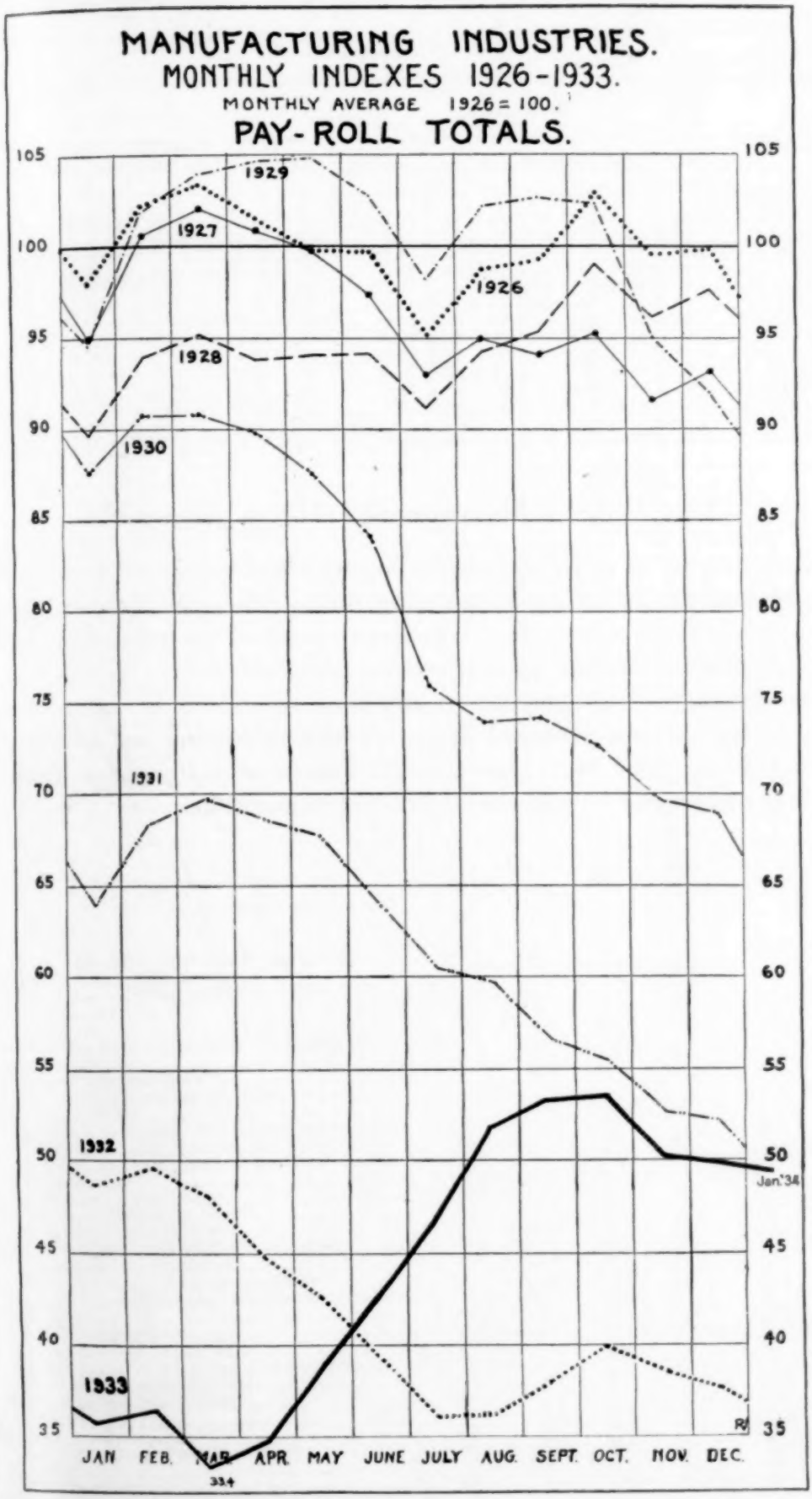

MANUFACTURING INDUSTRIES.
MONTHLY INDEXES 1926-1933.
MONTHLY AVERAGE 1926 = 100.
PAY-ROLL TOTALS.
105
100
95
90
85
80
75
70
65
60
55
50
45
40
35
1929
1927
1926
1928
1930
1931
1932
1933
Jan.'34
JAN
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.
33.4

TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND PAY ROLLS IN MANUFACTURING INDUSTRIES, JANUARY 1927 TO JANUARY 1934

[12-month average, 1926=100]

Month	Employment								Pay rolls							
	1927	1928	1929	1930	1931	1932	1933	1934	1927	1928	1929	1930	1931	1932	1933	1934
January	97.3	91.6	95.2	90.7	74.6	64.8	56.6	69.3	94.9	89.6	94.5	88.1	63.7	48.6	35.8	49.4
February	99.0	93.0	97.4	90.9	75.3	65.6	57.5	.....	100.6	93.9	101.8	91.3	68.1	49.6	36.4	.....
March	99.5	93.7	98.6	90.5	75.9	64.5	55.1	.....	102.0	95.2	103.9	91.6	69.6	48.2	33.4	.....
April	98.6	93.3	99.1	89.9	75.7	62.2	56.0	.....	100.8	93.8	104.6	90.7	68.5	44.7	34.9	.....
May	97.6	93.0	99.2	88.6	75.2	59.7	58.7	.....	99.8	94.1	104.8	88.6	67.7	42.5	38.9	.....
June	97.0	93.1	98.8	86.5	73.4	57.5	62.8	.....	97.4	94.2	102.8	85.2	63.8	39.3	43.1	.....
July	95.0	92.2	98.2	82.7	71.7	55.2	67.3	.....	93.0	91.2	98.2	77.0	60.3	36.2	46.5	.....
August	95.1	93.6	98.6	81.0	71.2	56.0	71.5	.....	95.0	94.2	102.1	75.0	59.7	36.3	51.9	.....
September	95.8	95.0	99.3	80.9	70.9	58.5	73.9	.....	94.1	95.4	102.6	75.4	56.7	38.1	53.3	.....
October	95.3	95.9	98.4	79.9	68.9	59.9	74.0	.....	95.2	99.0	102.4	74.0	55.3	39.9	53.6	.....
November	93.5	95.4	95.0	77.9	67.1	59.4	71.4	.....	91.6	96.1	95.4	69.6	52.5	38.6	50.3	.....
December	92.6	95.5	92.3	76.6	66.7	58.3	70.1	.....	93.2	97.7	92.4	68.8	52.2	37.7	49.8	.....
Average	**96.4**	**93.8**	**97.5**	**84.7**	**72.2**	**60.1**	**64.6**	.....	**96.5**	**94.5**	**100.5**	**81.3**	**61.5**	**41.6**	**44.0**	.....

Time Worked in Manufacturing Industries, January 1934

REPORTS as to working time in January were received from 14,395 establishments in 89 manufacturing industries. Of these establishments 3 percent were idle, 71 percent operated on a full-time basis, and 26 percent worked on a part-time schedule.

An average of 93 percent of full-time operation in January was shown by reports received from all the operating establishments included in table 4. The establishments working part time in January averaged 75 percent of full-time operation.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN JANUARY 1934

Industry	Establishments reporting		Percent of establishments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All operating establishments	Establishments operating part time
Food and kindred products	**2,534**	**1**	**84**	**16**	**97**	**81**
Baking	848	(1)	83	16	98	86
Beverages	319	(1)	69	30	94	79
Butter	206	1	82	17	96	79
Confectionery	256	(1)	86	13	97	80
Flour	372	1	91	9	97	69
Ice cream	254	2	79	19	95	77
Slaughtering and meat packing	210	1	96	3	99	82
Sugar, beet	58		93	7	99	80
Sugar refining, cane	11	9	55	36	91	78
Textiles and their products	**2,544**	**5**	**69**	**27**	**91**	**68**
Fabrics:						
Carpets and rugs	21	10	67	24	92	68
Cotton goods	593	1	67	31	89	66
Cotton small wares	101	5	72	23	93	73
Dyeing and finishing textiles	132	1	74	25	94	77
Hats, fur-felt	24	4	38	58	84	74
Knit goods	378	4	44	52	80	62
Silk and rayon goods	216	3	90	7	97	64
Woolen and worsted goods	224	2	90	8	97	69
Wearing apparel:						
Clothing, men's	274	9	74	17	94	69
Clothing, women's	342	11	72	17	93	63
Corsets and allied garments	23		35	65	87	80
Men's furnishings	49	8	61	31	90	71
Millinery	85	2	44	54	95	90
Shirts and collars	82	9	76	16	94	63
Iron and steel and their products, not including machinery	**1,080**	**3**	**61**	**36**	**90**	**73**
Bolts, nuts, washers, and rivets	37		57	43	90	77
Cast-iron pipe	33	18	27	55	84	76
Cutlery (not including silver and plated cutlery) and edge tools	105	3	61	36	90	74
Forgings, iron and steel	40		75	25	94	76
Hardware	73		42	58	82	69
Iron and steel	155	11	63	26	92	72
Plumbers' supplies	56	2	50	48	82	64
Steam and hot-water heating apparatus and steam fittings	80	1	59	40	86	66
Stoves	146	2	67	31	92	74
Structural and ornamental metalwork	165	2	64	35	94	84
Tin cans and other tinware	49		78	22	94	71
Tools (not including edge tools, machine tools, files, and saws)	91	2	57	41	89	73
Wirework	50		66	34	91	74
Machinery, not including transportation equipment	**1,478**	**1**	**67**	**33**	**92**	**75**
Agricultural implements	57	2	81	18	96	79
Cash registers, adding machines, and calculating machines	19		68	32	93	78
Electrical machinery, apparatus, and supplies	246		61	39	94	84
Engines, turbines, tractors, and water wheels	70	1	60	39	90	75
Foundry and machine-shop products	869	1	64	35	90	72
Machine tools	139		84	16	96	72
Radios and phonographs	29		66	34	95	83
Textile machinery and parts	42		83	17	96	76
Typewriters and supplies	7		86	14	98	88
Nonferrous metals and their products	**530**	(1)	**60**	**40**	**91**	**76**
Aluminum manufactures	21		29	71	79	70
Brass, bronze, and copper products	184		62	38	91	77
Clocks and watches and time-recording devices	21		71	29	94	79
Jewelry	98	1	38	61	87	78
Lighting equipment	38		61	39	89	71
Silverware and plated ware	50		54	46	88	75
Smelting and refining—copper, lead, and zinc	28		75	25	93	73
Stamped and enameled ware	90	1	82	17	96	77
Transportation equipment	**316**	**3**	**77**	**20**	**96**	**79**
Aircraft	21	5	76	19	97	86
Automobiles	159	1	84	14	98	82
Cars, electric- and steam-railroad	40	5	53	43	87	70
Locomotives	6		17	83	76	71
Shipbuilding	90	4	79	17	97	85

[1] Less than one half of 1 percent.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN JANUARY 1934—Continued

Industry	Establishments reporting		Percent of establishments operating—		Average percent of full time reported by—	
	Total number	Percent idle	Full time	Part time	All operating establishments	Establishments operating part time
Railroad repair shops	**680**	(1)	**50**	**50**	**90**	**81**
Electric railroad	274		93	7	98	79
Steam railroad	406	1	21	78	85	81
Lumber and allied products	**1,321**	**2**	**65**	**33**	**91**	**74**
Furniture	380	2	73	25	93	75
Lumber:						
Millwork	416	2	59	39	89	73
Sawmills	510	3	64	33	91	74
Turpentine and rosin	15		67	33	92	77
Stone, clay, and glass products	**738**	**17**	**60**	**23**	**92**	**71**
Brick, tile, and terra cotta	245	26	47	27	90	73
Cement	95	7	85	7	99	87
Glass	150	3	88	9	98	77
Marble, granite, slate, and other products	162	30	27	43	80	68
Pottery	86	6	81	13	94	55
Leather and its manufactures	**350**	**3**	**82**	**15**	**96**	**72**
Boots and shoes	215	4	77	19	94	69
Leather	135	1	90	9	98	82
Paper and printing	**1,684**	**1**	**82**	**17**	**96**	**76**
Boxes, paper	270	(1)	71	29	93	77
Paper and pulp	359	2	62	36	90	74
Printing and publishing:						
Book and job	663	(1)	91	9	98	73
Newspapers and periodicals	392		94	6	99	87
Chemicals and allied products	**826**	**1**	**78**	**20**	**96**	**78**
Chemicals	69		99	1	99	60
Cottonseed—oil, cake, and meal	79	9	71	20	92	64
Druggists' preparations	34		85	15	97	80
Explosives	15		20	80	89	86
Fertilizers	148	1	96	3	99	69
Paints and varnishes	284		62	38	92	80
Petroleum refining	103	2	88	10	99	90
Rayon and allied products	13		100		100	
Soap	81		86	14	97	82
Rubber products	**111**		**50**	**50**	**88**	**76**
Rubber boots and shoes	7		100		100	
Rubber goods, other than boots, shoes, tires, and inner tubes	82		51	49	89	77
Rubber tires and inner tubes	22		27	73	80	73
Tobacco manufactures	**203**	**11**	**57**	**32**	**89**	**70**
Chewing and smoking tobacco and snuff	28	7	75	18	95	73
Cigars and cigarettes	175	11	54	34	88	70
Total, 89 industries	**14,395**	**3**	**71**	**26**	**93**	**75**

[1] Less than one half of 1 percent.

Employment in Nonmanufacturing Industries in January 1934

SIX of the 15 nonmanufacturing industries surveyed monthly by the Bureau of Labor Statistics reported increased employment in January 1934 as compared with December 1933, and 6 industries reported increased pay rolls. Data for the building-construction industry are not presented here but are shown in more detail under the section "Building construction."

The gains were not in identical industries in every instance, the power and light industry reporting a small gain in employment combined with a slight decline in earnings, and the banks, brokerage, insurance, and real estate group reporting a very small decrease in employment coupled with slightly increased pay rolls. The most

pronounced gains in both employment and pay rolls over the month interval were in the anthracite-mining industry. Employment in this industry increased 17.6 percent and pay rolls increased 65.2 percent, reflecting sharply increased production over the month interval. The gain of 5 percent in the hotel industry was due to the combined effect of several factors, i.e., N.R.A. codes, repeal of national prohibition, and the opening of winter resort hotels. The telephone and telegraph industry reported an increase of 1.1 percent in employment and the gains in the remaining three industries reporting increased employment (bituminous-coal mining, power and light, and laundries) were five tenths of 1 percent or less. The most pronounced declines in employment and pay rolls between December and January (19.7 percent and 14.3 percent, respectively), were shown in the retail-trade group. This seasonal decline reflects to a large extent the release from employment of those workers temporarily employed for Christmas trade. The group composed of department, variety, and general merchandise stores and mail-order houses, showed a decrease of 27.2 percent in employment between December and January. Retail food stores surveyed by the Bureau showed a decrease of 1.7 percent in employment over the month interval. The remaining decreases which were of considerable size were shown in the canning industry (12.9 percent) and the quarrying and nonmetallic-mining industry (12.5 percent). The declines in these industries were seasonal, canning activities normally decreasing to a low level in January and operations in quarrying being greatly affected by weather conditions. The dyeing and cleaning industry reported a decline of 3.4 percent and the metalliferous-mining and the crude-petroleum-producing industries reported decreases in employment of 2.5 and 2.4 percent, respectively. The declines in employment in the remaining groups were slight—wholesale trade, 1.1 percent; electric-railroad and motor-bus operation and maintenance, five tenths of 1 percent; and banks, brokerage, insurance, and real estate, one tenth of 1 percent.

Thirteen of the 15 nonmanufacturing industries appearing in the following table reported increased employment and pay rolls between January 1933 and January 1934, crude-petroleum producing, canning and preserving, metalliferous mining, and anthracite mining reporting the largest percentage gains in employment over the year interval. Laundries reported no change in employment and an increase in pay rolls. The remaining two industries (electric-railroad and motor-bus operation and maintenance and telephone and telegraph) reported decreases in employment and pay roll over the 12-month period.

In the following table are presented employment and pay-roll data for the nonmanufacturing industries surveyed, exclusive of building construction.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY ROLLS IN NONMANUFACTURING ESTABLISHMENTS IN JANUARY 1934 WITH DECEMBER 1933 AND JANUARY 1933

Industrial group	Establishments reporting in both December 1933 and January 1934	Employment			Pay-roll totals			Index numbers, January 1934 (average 1929=100)	
		Number on pay roll January 1934	Percent of change		Amount of pay roll (1 week) January 1934	Percent of change		Employment	Pay-roll totals
			December 1933 to January 1934	January 1933 to January 1934		December 1933 to January 1934	January 1933 to January 1934		
Coal mining:									
Anthracite	160	89,077	+17.6	+22.1	$2,963,992	+65.2	+69.4	64.1	73.2
Bituminous	1,508	231,175	+.5	+8.6	4,025,325	+.9	+42.1	75.8	51.3
Metalliferous mining	283	25,903	−2.5	+22.2	537,363	−2.9	+40.3	39.6	25.4
Quarrying and nonmetallic mining	1,144	26,217	−12.5	+13.1	368,224	−12.6	+17.7	39.7	21.3
Crude-petroleum producing	254	27,750	−2.4	+28.0	768,647	−.4	+32.8	73.2	53.0
Public utilities:									
Telephone and telegraph	8,244	252,032	+1.1	−5.9	6,711,915	+1.8	−3.8	70.2	69.0
Power and light	3,098	205,570	+.5	+5.8	5,811,933	−.9	+1.1	82.2	73.8
Electric-railroad and motor-bus operation and maintenance	503	129,599	−.5	−.1	3,476,739	−.6	−2.8	70.5	59.2
Trade:									
Wholesale	2,993	85,182	−1.1	+9.4	2,220,315	−.9	+3.6	82.4	63.9
Retail	18,609	415,461	−19.7	+10.0	8,321,385	−14.3	+9.7	84.6	68.8
Hotels (cash payments only)[1]	2,294	114,014	+5.0	+10.4	1,406,405	+5.7	+9.2	81.5	60.8
Canning and preserving	771	36,914	−12.9	+26.4	470,664	−9.3	+42.7	43.1	35.4
Laundries	1,240	64,529	+.2	(2)	957,027	+1.0	+1.7	75.4	58.9
Dyeing and cleaning	334	9,455	−3.4	+1.1	163,719	−1.1	+6.0	73.8	49.4
Banks, brokerage, insurance, and real estate	4,469	175,943	[3]−.1	[3]+1.7	5,858,980	[3]+.8	[3]+3.4	[3] 99.2	[3] 88.1

[1] The additional value of board, room, and tips cannot be computed.
[2] No change.
[3] Weighted.

Per capita weekly earnings in January 1934 for 15 nonmanufacturing industries included in the Bureau's monthly trend-of-employment survey, together with the percentages of change in January 1934 as compared with December 1933 and January 1933, are given in the table following. These earnings must not be confused with full-time weekly rates of wages; they are per capita weekly earnings computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN 15 NONMANUFACTURING INDUSTRIES IN JANUARY 1934 AND COMPARISON WITH DECEMBER 1933 AND JANUARY 1933

Industrial group	Per capita weekly earnings in January 1934	Percent of change January 1934 compared with—	
		December 1933	January 1933
Coal mining:			
Anthracite	$33.27	+40.5	+38.8
Bituminous	17.41	+.4	+30.9
Metalliferous mining	20.75	−.4	+14.7
Quarrying and nonmetallic mining	14.05	−.1	+4.1
Crude-petroleum producing	27.70	+2.0	+3.7
Public utilities:			
Telephone and telegraph	26.63	+.8	+2.3
Power and light	28.27	−1.5	−4.5
Electric-railroad and motor-bus operation and maintenance	26.83	−.1	−2.7
Trade:			
Wholesale	26.07	+.2	−5.4
Retail	20.03	+6.7	−.2
Hotels (cash payments only) [1]	12.34	+.7	−1.2
Canning and preserving	12.75	+4.2	+12.9
Laundries	14.83	+.7	+1.7
Dyeing and cleaning	17.32	+2.4	+4.9
Banks, brokerage, insurance, and real estate	33.30	[2] +.9	[2] +1.6

[1] The additional value of board, room, and tips cannot be computed.
[2] Weighted.

Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries

INDEX numbers of employment and pay-roll totals for 15 nonmanufacturing industries are presented in table 3. These index numbers show the variation in employment and pay rolls by months, from January 1931 to January 1934, in all nonmanufacturing industries except the banks, brokerage, insurance, and real estate group, for which information for 1931 is not available. The Bureau has, however, secured data concerning employment and pay rolls for the index base year, 1929, from establishments in this group and has computed index numbers for those months for which data are available from the Bureau's files. These indexes are shown in the table.

TABLE 3.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR NONMANUFACTURING INDUSTRIES, JANUARY 1931, TO JANUARY 1934

[12-month average, 1929=100]

Month	Anthracite mining								Bituminous-coal mining							
	Employment				Pay rolls				Employment				Pay rolls			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January	90.6	76.2	52.5	64.1	89.3	61.5	43.2	73.2	93.9	80.8	69.8	75.8	73.3	47.0	36.1	51.3
February	89.5	71.2	58.7	.....	101.9	57.3	56.8	.....	91.5	77.4	69.3	.....	68.3	47.0	37.2	.....
March	82.0	73.7	54.6	.....	71.3	61.2	48.8	.....	88.8	75.2	67.6	.....	65.2	46.8	30.7	.....
April	85.2	70.1	51.6	.....	75.2	72.0	37.4	.....	85.9	65.5	63.7	.....	58.6	33.9	26.6	.....
May	80.3	66.9	43.2	.....	76.1	58.0	30.0	.....	82.4	62.6	61.2	.....	54.4	30.7	26.9	.....
June	76.1	53.0	39.5	.....	66.7	37.4	34.3	.....	78.4	60.5	61.3	.....	52.4	27.3	29.2	.....
July	65.1	44.5	43.8	.....	53.7	34.5	38.2	.....	76.4	58.6	63.2	.....	50.4	24.4	33.6	.....
August	67.3	49.2	47.7	.....	56.4	41.4	46.6	.....	77.0	59.4	68.6	.....	50.6	26.4	43.3	.....
September	80.0	55.8	56.8	.....	64.9	47.0	60.7	.....	80.4	62.4	71.8	.....	53.6	30.2	44.1	.....
October	86.8	63.9	56.9	.....	91.1	66.7	61.6	.....	81.3	67.0	68.0	.....	56.2	37.8	44.1	.....
November	83.5	62.7	61.0	.....	79.5	51.0	47.8	.....	81.1	69.4	74.8	.....	54.6	38.0	50.7	.....
December	79.8	62.3	54.5	.....	78.4	56.2	44.3	.....	81.2	70.0	75.4	.....	52.3	37.7	50.8	.....
Average	80.5	62.5	51.7	.....	75.4	53.7	45.8	.....	83.2	67.4	67.9	.....	57.5	35.6	37.8	.....
	Metalliferous mining								Quarrying and nonmetallic mining							
January	68.3	49.3	32.4	39.6	55.0	29.7	18.1	25.4	64.4	48.9	35.1	39.7	50.4	30.2	18.1	21.3
February	65.3	46.9	31.5	.....	54.6	27.8	17.8	.....	66.6	47.4	34.8	.....	54.4	29.6	17.4	.....
March	63.5	45.0	30.0	.....	52.8	26.5	17.4	.....	70.0	46.0	35.1	.....	58.2	28.7	17.8	.....
April	63.9	43.3	29.4	.....	51.4	25.0	16.4	.....	76.1	48.6	39.3	.....	62.6	30.0	20.2	.....
May	62.4	38.3	30.0	.....	49.3	23.8	17.0	.....	75.0	50.6	43.4	.....	62.3	32.3	23.8	.....
June	60.0	32.2	31.5	.....	46.1	20.1	18.3	.....	72.3	49.5	47.3	.....	60.1	30.0	27.5	.....
July	56.2	29.5	33.0	.....	41.3	16.9	19.0	.....	71.0	49.5	49.5	.....	57.3	29.1	28.4	.....
August	55.8	28.6	36.8	.....	40.2	16.5	21.9	.....	68.9	51.1	51.6	.....	55.1	29.7	29.9	.....
September	55.5	29.3	38.9	.....	40.0	17.0	23.9	.....	66.6	52.4	52.6	.....	51.2	30.5	29.3	.....
October	53.8	30.5	40.7	.....	37.4	18.0	25.9	.....	64.5	52.4	53.2	.....	48.7	30.1	31.2	.....
November	52.8	31.9	40.6	.....	35.1	18.7	25.6	.....	59.3	49.4	51.1	.....	43.3	27.1	28.3	.....
December	51.2	33.3	40.6	.....	34.3	18.7	26.2	.....	53.9	42.3	45.3	.....	36.9	22.1	24.4	.....
Average	59.1	36.5	34.6	.....	44.8	21.6	20.6	.....	67.4	49.0	44.9	.....	53.4	29.1	24.7	.....
	Crude-petroleum producing								Telephone and telegraph							
January	74.8	54.9	57.2	73.2	71.5	46.5	39.9	53.0	90.5	83.0	74.6	70.2	96.3	89.1	71.7	69.0
February	73.2	54.4	57.0	.....	70.0	46.9	41.7	.....	89.2	82.0	73.9	.....	94.8	89.6	71.9	.....
March	72.2	51.4	56.5	.....	73.2	43.2	42.5	.....	88.6	81.7	73.2	.....	97.9	88.2	71.6	.....
April	69.8	54.9	56.8	.....	66.3	44.5	40.1	.....	88.1	81.2	72.3	.....	95.0	83.4	67.8	.....
May	67.8	54.5	56.9	.....	64.7	47.1	41.6	.....	87.4	80.6	70.1	.....	94.1	82.8	68.5	.....
June	65.0	54.2	58.0	.....	62.7	44.8	40.6	.....	86.9	79.9	69.2	.....	95.0	82.1	66.6	.....
July	65.3	55.4	59.5	.....	59.2	44.6	42.2	.....	86.6	79.1	68.5	.....	93.3	79.6	66.7	.....
August	62.4	57.4	60.8	.....	56.3	42.9	42.5	.....	85.9	78.1	68.1	.....	92.3	79.1	66.1	.....
September	61.2	56.2	66.2	.....	55.2	41.9	44.4	.....	85.0	77.4	68.3	.....	92.1	75.9	64.6	.....
October	60.4	56.8	70.6	.....	54.4	42.5	50.1	.....	84.1	76.2	68.7	.....	91.6	75.7	67.0	.....
November	57.6	56.5	72.2	.....	52.0	42.4	50.3	.....	83.5	75.5	68.9	.....	89.7	74.3	67.7	.....
December	58.2	57.2	75.0	.....	54.9	41.7	53.2	.....	83.1	74.8	69.4	.....	92.7	73.5	67.7	.....
Average	65.7	55.3	62.2	.....	61.7	44.1	44.1	.....	86.6	79.1	70.4	.....	93.7	81.1	68.2	.....
	Power and light								Electric-railroad and motor-bus operation and maintenance [1]							
January	99.2	89.3	77.7	82.2	98.6	88.4	73.0	73.8	86.9	79.5	70.6	70.5	85.6	75.4	60.9	59.2
February	97.8	87.2	77.4	.....	99.7	86.0	71.6	.....	86.6	78.9	70.4	.....	87.1	74.8	60.6	.....
March	96.7	85.5	76.9	.....	102.4	85.4	71.9	.....	86.4	77.6	69.8	.....	88.1	73.6	59.4	.....
April	97.1	84.8	76.9	.....	97.6	82.4	69.4	.....	86.8	78.0	69.5	.....	86.6	71.8	58.1	.....
May	97.6	84.0	76.9	.....	98.7	84.2	69.9	.....	85.9	76.9	69.1	.....	85.1	72.2	58.2	.....
June	97.2	83.2	77.3	.....	98.3	80.5	69.9	.....	85.3	76.5	69.3	.....	84.8	70.2	58.0	.....
July	96.7	82.3	77.5	.....	97.4	78.7	70.0	.....	85.6	75.6	69.4	.....	83.3	66.4	57.4	.....
August	95.9	81.5	78.1	.....	96.2	76.7	70.9	.....	84.8	74.1	69.5	.....	81.9	63.8	58.2	.....
September	94.7	81.0	80.3	.....	94.3	74.7	71.8	.....	84.0	73.5	69.7	.....	81.2	62.5	57.8	.....
October	92.7	79.9	82.2	.....	93.2	74.4	76.2	.....	82.7	72.3	70.6	.....	79.0	61.5	59.8	.....
November	91.3	79.1	82.6	.....	93.3	73.2	74.5	.....	81.5	71.8	71.0	.....	79.7	61.7	59.4	.....
December	90.3	78.4	81.8	.....	91.2	73.2	74.4	.....	79.9	71.4	70.8	.....	77.8	61.9	59.6	.....
Average	95.6	83.0	78.8	.....	96.7	79.8	72.0	.....	84.7	75.5	70.0	.....	83.4	68.0	58.9	.....

[1] Not including electric-railroad-car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

TABLE 3.—INDEXES OF EMPLOYMENT AND PAY ROLLS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY 1931 TO JANUARY 1934—Continued

Month	Wholesale trade								Retail trade							
	Employment				Pay rolls				Employment				Pay rolls			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
January	89.5	81.8	75.3	82.4	87.5	74.1	61.7	63.9	90.0	84.3	76.9	84.6	89.4	78.0	62.7	68.8
February	88.2	80.9	74.1	.....	88.4	72.5	58.6	.....	87.1	80.5	73.4	.....	86.7	73.7	58.4	.....
March	87.4	79.8	73.1	.....	89.1	71.3	57.1	.....	87.8	81.4	71.4	.....	87.5	73.4	55.1	.....
April	87.4	78.9	73.3	.....	85.2	68.9	56.0	.....	90.1	81.6	78.6	.....	88.3	72.7	60.4	.....
May	87.1	77.9	74.0	.....	84.7	69.7	57.4	.....	89.9	80.9	77.0	.....	88.0	71.1	59.5	.....
June	87.1	77.0	75.7	.....	84.1	66.2	57.3	.....	89.1	79.4	78.3	.....	87.6	68.2	60.5	.....
July	86.8	76.6	76.9	.....	83.3	64.7	59.1	.....	83.9	74.6	74.6	.....	83.3	63.3	58.1	.....
August	86.5	76.4	79.7	.....	82.1	63.2	60.8	.....	81.8	72.6	78.1	.....	80.3	60.7	62.7	.....
September	86.1	77.1	82.1	.....	81.4	63.1	62.3	.....	86.6	77.8	86.0	.....	83.5	64.6	69.2	.....
October	85.2	77.8	83.5	.....	79.9	63.9	66.0	.....	89.8	81.3	89.6	.....	84.6	67.1	72.3	.....
November	84.1	77.6	83.4	.....	79.7	63.3	64.1	.....	90.9	81.7	91.6	.....	85.4	66.9	72.6	.....
December	83.7	77.0	83.3	.....	77.8	62.6	64.5	.....	106.2	95.2	105.4	.....	94.1	73.6	80.3	.....
Average	86.6	78.2	77.9	.....	83.6	67.0	60.4	.....	89.4	80.9	81.7	.....	86.6	69.4	64.3	.....
	Hotels								Canning and preserving							
January	95.0	83.2	73.8	81.5	91.0	73.9	55.7	60.8	48.9	35.0	34.1	43.1	46.1	31.8	24.8	35.4
February	96.8	84.3	73.8	.....	93.7	73.9	55.9	.....	48.3	37.1	35.1	.....	48.6	32.7	25.9	.....
March	96.8	84.0	72.4	.....	93.4	72.4	53.5	.....	53.0	36.3	33.2	.....	50.3	31.9	24.2	.....
April	95.9	82.7	71.9	.....	89.9	69.6	51.7	.....	59.6	47.0	49.2	.....	57.1	37.9	33.5	.....
May	92.5	80.1	71.9	.....	87.7	67.0	51.8	.....	56.0	40.5	45.5	.....	56.0	36.0	31.8	.....
June	91.6	78.0	73.6	.....	85.4	63.8	52.3	.....	70.6	55.5	55.6	.....	58.6	40.5	36.7	.....
July	93.3	78.4	75.6	.....	85.2	61.8	53.3	.....	102.2	73.0	76.6	.....	74.2	47.5	46.2	.....
August	92.8	77.6	77.1	.....	83.8	59.6	54.0	.....	142.9	99.0	112.7	.....	104.7	65.6	68.3	.....
September	90.6	77.0	78.7	.....	81.9	59.1	55.6	.....	180.1	125.3	175.6	.....	129.4	75.1	127.0	.....
October	87.4	75.4	77.0	.....	79.7	58.6	56.2	.....	108.1	81.1	26.3	.....	77.6	51.8	87.1	.....
November	84.9	74.3	75.8	.....	77.1	57.5	55.2	.....	60.8	50.5	69.3	.....	48.1	34.4	50.8	.....
December	83.1	73.2	77.6	.....	75.4	56.6	57.6	.....	40.7	33.7	49.4	.....	36.9	25.6	39.0	.....
Average	91.7	79.0	74.9	.....	85.4	64.5	54.4	.....	80.9	59.5	71.9	.....	65.6	42.6	49.6	.....
	Laundries								Dyeing and cleaning							
January	90.5	84.7	75.4	75.4	86.6	76.4	57.9	58.9	88.9	82.1	73.0	73.8	77.7	65.8	46.6	49.4
February	90.0	82.9	74.4	.....	85.6	73.3	55.5	.....	87.4	80.5	70.9	.....	75.1	62.2	42.4	.....
March	89.5	82.0	73.0	.....	85.6	71.6	52.9	.....	88.0	80.6	71.2	.....	75.6	61.7	41.0	.....
April	90.5	82.0	73.4	.....	86.8	71.4	54.0	.....	95.7	83.3	81.1	.....	86.3	65.9	54.6	.....
May	90.3	81.4	73.5	.....	86.5	70.6	54.5	.....	96.7	84.5	82.0	.....	86.6	67.3	53.9	.....
June	91.0	81.0	76.0	.....	87.1	68.6	56.7	.....	99.0	85.1	85.6	.....	89.1	65.8	56.7	.....
July	91.8	80.3	76.3	.....	87.4	66.3	56.1	.....	98.6	82.4	82.9	.....	86.2	60.0	52.8	.....
August	90.2	78.9	77.9	.....	84.6	63.9	57.6	.....	93.5	79.5	83.1	.....	80.0	56.3	52.8	.....
September	89.3	78.6	79.3	.....	84.1	62.9	60.6	.....	95.3	83.3	88.6	.....	82.6	61.0	60.3	.....
October	88.1	77.5	78.0	.....	81.8	61.2	59.7	.....	94.2	82.3	88.4	.....	81.4	58.8	60.6	.....
November	86.2	76.2	75.3	.....	78.9	59.1	57.9	.....	90.1	78.0	82.4	.....	74.7	52.3	55.4	.....
December	85.3	75.9	75.2	.....	77.4	58.7	58.3	.....	84.9	75.2	76.3	.....	67.9	48.4	50.0	.....
Average	89.4	80.1	75.6	.....	84.4	67.0	56.8	.....	92.7	81.4	80.5	.....	80.3	60.5	52.3	.....
	Banks, brokerage insurance, and real estate															
January	.....	98.3	97.5	99.2	.....	93.5	85.2	88.1	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	98.3	96.8	.....	.....	93.0	84.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	98.9	96.5	.....	.....	92.9	83.7	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	98.6	96.2	.....	.....	92.1	82.9	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	98.0	96.2	.....	.....	92.7	83.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	97.9	97.3	.....	.....	90.0	84.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	98.4	97.7	.....	.....	89.8	84.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	98.5	98.3	.....	.....	88.2	84.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	98.4	99.0	.....	.....	87.1	84.5	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	98.6	99.4	.....	.....	86.3	84.7	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	98.0	99.6	.....	.....	85.7	86.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	98.0	99.3	.....	.....	85.5	87.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average	.....	98.3	97.8	.....	.....	89.7	84.6	.....	.....	.....	.....	.....	.....	.....	.....	.....

Average Man-Hours Worked and Average Hourly Earnings

IN THE following tables the Bureau presents a tabulation of man-hours worked per week and average hourly earnings based on reports supplied by identical establishments in December 1933 and January 1934 in 15 industrial groups and 78 separate manufacturing industries. Man-hour data for the building-construction group and

for the insurance, real estate, banking, and brokerage group are not available, and data for several of the 89 manufacturing industries surveyed monthly are omitted from these tables due to lack of adequate information.

The total number of establishments supplying man-hour data in these 15 industrial groups represents approximately 50 percent of the establishments supplying monthly employment data.

The tabulations are based on reports supplying actual man-hours worked and do not include nominal man-hour totals, obtained by multiplying the total number of employees in the establishment by the plant operating time.

Table 1 shows the average hours worked per employee per week and average hourly earnings in 15 industrial groups and for all groups combined. The average hours per week and average hourly earnings for the combined total of the 15 industrial groups are weighted averages, wherein the average man-hours and average hourly earnings in each industrial group are multiplied by the total number of employees in the group in the current month and the sum of these products divided by the total number of employees in the combined 15 industrial groups. The average man-hours and hourly earnings for the combined 89 manufacturing industries have been weighted in the same manner as the averages for all industrial groups combined (table 1).

In presenting information for the separate manufacturing industries shown in table 2, data are published for only those industries in which the available man-hour information covers 20 percent or more of the total number of employees in the industry at the present time.

TABLE 1.—AVERAGE HOURS WORKED PER WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN 15 INDUSTRIAL GROUPS, IN JANUARY 1934 AND PERCENT OF CHANGE FROM DECEMBER 1933

Industrial group	Average hours per week		Average hourly earnings	
	January 1934	Percent of change from December 1933	January 1934	Percent of change from December 1933
			Cents	
Manufacturing	33.7	−0.9	53.3	+0.9
Coal mining:				
Anthracite	39.5	+32.6	85.0	+6.1
Bituminous	30.3	+2.0	58.9	−.5
Metalliferous mining	38.7	−1.3	53.5	+.8
Quarrying and nonmetallic mining	30.8	−1.9	45.6	+.2
Crude-petroleum producing	36.5	+3.7	76.9	−.5
Public utilities:				
Telephone and telegraph	37.6	+.5	71.6	+.1
Power and light	38.9	−9.3	72.5	+8.4
Electric-railroad and motor-bus operation and maintenance	45.0	−.2	59.1	+.2
Trade:				
Wholesale	41.5	−.5	61.9	+.7
Retail	40.7	−4.7	51.1	+12.1
Hotels	48.9	−1.8	24.6	+4.2
Canning and preserving	32.9	+.6	40.2	+1.8
Laundries	38.6	+1.3	37.9	−.8
Dyeing and cleaning	39.2	−.3	45.1	+2.7
Average	37.0	−1.9	53.9	+3.9

Per capita weekly earnings, computed by multiplying the average man-hours worked per week by the average hourly earnings, are not identical with the per capita weekly earnings appearing elsewhere in this trend-of-employment compilation, which are obtained by dividing the total weekly earnings in all establishments reporting by the total number of employees in those establishments. As already noted, the basic information upon which the average weekly man-hours and average hourly earnings are computed covers approximately 50 percent of the establishments reporting monthly employment data.

TABLE 2.—AVERAGE HOURS WORKED FOR WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED **MANUFACTURING** INDUSTRIES, IN JANUARY 1934 AND PERCENT OF CHANGE FROM DECEMBER 1933

Industry	Average hours per week		Average hourly earnings	
	January 1934	Percent of change from December 1933	January 1934	Percent of change from December 1933
Food and kindred products:			*Cents*	
Baking	40.8	+0.5	50.8	+0.2
Beverages	37.2	−2.4	74.5	−2.0
Confectionery	37.2	+1.1	40.7	+1.0
Flour	38.7	+1.6	50.5	−1.4
Ice cream	40.9	−1.9	62.9	+1.1
Slaughtering and meat packing	40.9	+1.7	52.5	+.2
Sugar, beet	35.3	−28.1	49.7	+21.2
Sugar refining, cane	34.1	−2.8	58.5	+1.6
Textiles and their products:				
Fabrics:				
Carpets and rugs	32.3	+3.5	49.7	+1.0
Cotton goods	34.1	+2.4	37.4	+.3
Cotton small wares	34.8	+1.8	45.0	+.9
Dyeing and finishing textiles	33.3	−5.4	52.5	+.8
Knit goods	27.9	−18.4	46.3	+2.0
Silk and rayon goods	31.0	(1)	44.2	+1.1
Woolen and worsted goods	33.8	−.6	49.1	+1.2
Iron and steel and their products, not including machinery:				
Bolts, nuts, washers, and rivets	32.6	−2.7	51.4	+2.
Cast-iron pipe	30.7	−7.5	47.2	+.4
Cutlery (not including silver and plated cutlery) and edge tools	36.2	−3.5	52.7	+1.0
Forgings, iron and steel	34.7	+.6	56.8	−.5
Hardware	33.1	−3.2	52.9	−.4
Iron and steel	29.4	−2.3	58.5	(1)
Plumbers' supplies	26.8	−3.9	50.5	−2.9
Steam and hot-water heating apparatus and steam fittings	34.0	+3.0	56.4	+1.3
Stoves	30.5	−3.8	52.2	+.2
Structural and ornamental metal work	31.1	−4.3	55.5	−.4
Tin cans and other tinware	34.3	−8.0	55.4	+5.7
Tools (not including edge tools, machine tools, files, and saws)	35.3	+.6	50.9	−.6
Wirework	37.9	+7.4	56.6	+5.8
Machinery, not including transportation equipment:				
Agricultural implements	36.4	+1.1	53.1	+.6
Cash registers, adding machines, and calculating machines	39.2	−1.5	65.0	+.2
Electrical machinery, apparatus, and supplies	31.5	(1)	57.0	−.9
Engines, turbines, tractors, and water wheels	36.2	−1.1	60.1	−.2
Foundry and machine-shop products	33.4	+.9	56.8	−.4
Machine tools	37.0	−.5	57.9	+.2
Radios and phonographs	30.3	−2.6	54.1	+1.9
Textile machinery and parts	36.9	+.8	61.7	−1.6
Typewriters and supplies	38.3	−6.9	50.5	+.6
Nonferrous metals and their products:				
Aluminum manufactures	31.5	−8.7	48.2	+3.4
Brass, bronze, and copper products	35.4	(1)	53.5	+2.0
Clocks and watches and time-recording devices	35.8	−6.5	45.8	−1.9
Jewelry	31.5	−15.1	52.0	+1.8
Lighting equipment	35.9	−6.5	51.5	+.2
Silverware and plated ware	36.6	−8.0	50.3	+1.0
Smelting and refining—copper, lead, and zinc	36.7	+8.3	50.6	−1.7
Stamped and enameled ware	33.7	(1)	48.1	+.4

[1] No change.

TABLE 2.—AVERAGE HOURS WORKED FOR WEEK PER EMPLOYEE AND AVERAGE HOURLY EARNINGS IN SELECTED **MANUFACTURING** INDUSTRIES, IN JANUARY 1934 AND PERCENT OF CHANGE FROM DECEMBER 1933—Continued

Industry	Average hours per week		Average hourly earnings	
	January 1934	Percent of change from December 1933	January 1934	Percent of change from December 1933
Transportation equipment:			*Cents*	
Aircraft	39.5	−0.3	65.4	+1.4
Automobiles	32.4	+5.5	63.1	−.6
Cars, electric- and steam-railroad	32.2	−3.0	56.8	−2.2
Locomotives	32.1	+.9	60.0	+.5
Shipbuilding	30.1	−3.5	69.6	+8.1
Railroad repair shops:				
Electric railroad	43.6	−1.1	58.2	(1)
Steam railroad	36.3	−3.7	61.4	(1)
Lumber and allied products:				
Furniture	30.3	−7.9	44.6	+2.5
Lumber:				
Millwork	32.7	−3.5	44.0	+2.3
Sawmills	31.8	−3.9	42.3	−.2
Stone, clay, and glass products:				
Brick, tile, and terra cotta	30.7	+1.0	42.4	+3.2
Cement	31.4	+7.9	55.7	−1.1
Glass	33.8	−.9	52.3	+.4
Marble, granite, slate, and other products	29.8	−6.0	60.3	(1)
Pottery	33.7	−10.8	47.8	+6.2
Leather and its manufactures:				
Leather	37.1	−2.4	52.3	+.6
Paper and printing:				
Boxes, paper	34.4	−5.0	49.6	+2.3
Paper and pulp	35.3	(1)	49.8	−.2
Printing and publishing:				
Book and job	36.3	−.5	71.0	−.3
Newspapers and periodicals	37.1	−1.6	82.6	−.6
Chemicals and allied products:				
Chemicals	39.2	−1.3	60.0	+.2
Cottonseed—oil, cake, and meal	41.8	+1.7	25.1	−.4
Druggists' preparations	37.3	−2.4	48.7	+3.4
Explosives	34.1	+1.8	61.0	+1.0
Fertilizers	33.3	+.3	36.1	+.6
Paints and varnishes	37.8	−.8	53.8	+.6
Petroleum refining	35.5	−.6	69.3	+.6
Rayon and allied products	36.0	−5.0	48.3	+.2
Soap	38.4	+1.1	52.9	+.8
Rubber products:				
Rubber goods, other than boots, shoes, tires, and inner tubes	33.9	−2.6	51.6	+4.9
Rubber tires and inner tubes	30.3	+1.7	71.9	−.4
Tobacco manufactures:				
Chewing and smoking tobacco and snuff	36.3	+4.0	37.5	−2.1
Cigars and cigarettes	35.4	−4.6	36.3	+.6

[1] No change.

Employment in Building Construction in January 1934

IN January 1934, as compared with December 1933, the percentages of increase or decrease in employment, pay rolls, and man-hours in building construction were as follows:

	Percent
Total employment	−12.6
Total pay rolls	−9.3
Total man-hours worked	−8.0
Average weekly earnings	+3.7
Average hours per week per man	+3.7
Average hourly earnings	+1.2

The table following is based on returns made by 11,142 firms engaged on public and private building-construction projects not aided by public-works funds. These reports include all trades, from excavation through painting and interior decoration, which do their share of work in erecting, altering, or repairing buildings. Work on roads, bridges, docks, etc., is omitted. The reports cover building operations in various localities in 34 States and the District of Columbia.

The 11,142 firms employed 62,144 workers in January as compared to 71,114 workers in December, and had a total pay roll of $1,365,907 in January as compared with $1,506,686 in December. The average weekly earnings for the January group amounted to $21.98 as compared to $21.19 for the December group of workers. These are per capita weekly earnings, computed by dividing the total amount of the weekly pay roll by the total number of employees—part time as well as full time.

Of the 11,142 cooperating firms, 7,471 firms, or 67.1 percent, reported the man-hours worked by their employees, namely, 816,125 in January as compared with 886,670 in December.

The average hours per week per man were computed by dividing the total number of man-hours by the total number of workers employed by the 7,471 firms which reported the man-hours. The average hourly earnings were computed by dividing the total pay roll of the 7,471 firms which reported man-hours, by the man-hours.

EMPLOYMENT, PAY ROLLS, AVERAGE WEEKLY EARNINGS, AVERAGE HOURS PER WEEK PER MAN, AND AVERAGE HOURLY EARNINGS IN THE **BUILDING-CONSTRUCTION INDUSTRY** IN JANUARY 1934, AND PERCENTAGES OF CHANGE FROM DECEMBER 1933

Locality	Number of firms reporting	Employment		Pay rolls		Average weekly earnings		Average hours per week per man [1]		Average hourly earnings [1]	
		Number on pay roll January 1934	Percent of change from December 1933	Amount January 1934	Percent of change from December 1933	Amount January 1934	Percent of change from December 1933	Number January 1934	Percent of change from December 1933	Amount January 1934	Percent of change from December 1933
										Cents	
All localities	11,142	62,144	−12.6	$1,365,907	−9.3	$21.98	+3.7	27.9	+3.7	77.5	+1.2
Alabama: Birmingham	75	254	−11.5	3,487	−4.6	13.73	+7.8	25.1	+3.7	53.0	+3.7
California:											
Los Angeles [2]	23	1,172	+4.0	23,113	+.6	19.72	−3.3	(3)	(3)	(3)	(3)
San Francisco-Oakland [2]	25	484	−26.9	15,385	+11.8	31.79	+52.9	(3)	(3)	(3)	(3)
Other localities [2]	15	336	−3.7	7,364	−3.2	21.92	+.5	(3)	(3)	(3)	(3)
The State	63	1,992	−6.8	45,862	+3.4	23.02	+11.0	(3)	(3)	(3)	(3)
Colorado: Denver	224	612	−8.1	11,865	−9.8	19.39	−1.9	25.1	+.8	78.4	−3.7
Connecticut:											
Bridgeport	126	325	−19.0	7,176	−11.1	22.08	+9.7	26.6	(4)	81.6	+10.6
Hartford	252	686	−16.3	15,000	−9.1	21.87	+8.6	30.8	+7.3	68.3	+1.9
New Haven	178	668	−13.9	16,424	+5.9	24.59	+23.0	32.6	+25.9	75.1	−.1
The State	556	1,679	−15.9	38,600	−3.7	22.99	+14.5	30.8	+13.4	73.3	+2.7
Delaware: Wilmington	115	617	+.5	10,890	+.3	17.65	−.2	28.6	+3.2	61.9	−4.2
District of Columbia	482	5,463	−5.7	159,276	+5.4	29.16	+11.8	31.9	+34.4	90.7	+1.5
Florida:											
Jacksonville	57	208	−59.9	4,019	−54.0	19.32	+14.7	27.9	−12.0	67.7	+12.8
Miami	85	664	−23.2	13,250	−21.1	19.95	+2.7	27.4	−6.5	70.8	+10.6
The State	142	872	−37.0	17,269	−32.4	19.80	+7.3	27.5	−8.0	70.0	+11.3
Georgia: Atlanta	174	900	−12.9	14,379	−14.0	15.98	−1.3	27.2	+8.8	55.2	−10.4
Illinois:											
Chicago [2]	137	1,684	+16.8	34,442	+8.1	20.45	−7.5	(3)	(3)	(3)	(3)
Other localities [2]	97	1,268	−35.5	34,251	−33.6	27.01	+2.9	(3)	(3)	(3)	(3)
The State	234	2,952	−13.4	68,693	−17.7	23.27	−5.0	(3)	(3)	(3)	(3)
Indiana:	58	162	+1.9	2,361	−10.2	14.57	−11.9	21.2	−10.5	66.6	−5.0
						20.06	+5.4	29.2	+3.5	68.9	−1.4
										69.5	+7.4

The State	234	2,952	−13.4	68,693	−17.7	23.27	−5.0	(3)	(3)	(3)	(3)
Indiana:											
Evansville	58	162	+1.9	2,361	−10.2	14.57	−11.9	21.2	−10.5	66.6	−5.0
Fort Wayne	87	280	−10.3	5,617	−5.5	20.06	+5.4	29.2	+3.5	68.9	−1.4
Indianapolis	158	742	−21.0	14,296	−19.3	19.27	+2.2	27.0	−4.6	69.5	+7.4
South Bend	38	187	−23.4	4,382	−6.9	23.43	+21.5	30.3	+17.9	77.2	+2.3
The State	341	1,371	−17.1	26,656	−14.0	19.44	+3.7	27.3	−.5	70.4	+3.8
Iowa: Des Moines	108	249	−14.4	5,071	−11.6	20.37	+3.3	27.1	−1.8	76.3	+5.4
Kansas: Wichita	69	171	+.6	2,639	−2.9	15.43	−3.4	24.9	−.4	64.8	−.9
Kentucky: Louisville	153	773	−10.0	13,733	−8.8	17.77	+1.4	30.6	+1.3	56.0	−1.8
Louisiana: New Orleans	112	533	−18.3	9,381	−13.8	17.60	+5.5	27.4	+.4	62.1	+6.3
Maine: Portland	105	285	−12.8	5,956	−7.7	20.90	+5.9	28.3	−.4	71.6	+5.3
Maryland: Baltimore [2]	125	1,279	−1.0	23,688	+10.2	18.52	+11.4	(3)	(3)	(3)	(3)
Massachusetts: All localities [2]	701	3,559	−12.1	84,093	−6.6	23.63	+6.2	(3)	(3)	(3)	(3)
Michigan:											
Detroit	487	2,659	−24.2	57,581	−22.0	21.66	+2.9	32.1	+11.5	69.0	−.1
Flint	59	130	−23.1	1,880	−31.0	14.46	−10.2	20.4	−13.9	71.6	+10.0
Grand Rapids	105	222	−27.2	3,837	−12.2	17.28	+20.6	25.1	+4.1	67.7	+15.1
The State	651	3,011	−24.4	63,298	−21.8	21.02	+3.4	31.0	+10.0	69.0	+1.2
Minnesota:											
Duluth	48	199	−32.8	3,069	−20.2	15.42	+18.7	25.8	+15.2	68.5	−7.4
Minneapolis	253	934	−20.6	19,092	−13.8	20.44	+8.5	26.6	+9.9	78.4	+1.3
St. Paul	178	804	−3.4	20,420	+16.7	25.40	+20.8	30.5	+10.9	83.2	+12.4
The State	479	1,937	−15.9	42,581	−2.1	21.98	+16.4	28.2	+11.3	80.0	+5.5
Missouri:											
Kansas City [5]	297	1,151	−17.0	22,510	−25.5	19.56	−10.2	23.0	−10.9	87.1	+.6
St. Louis	619	2,502	−12.8	64,614	−18.6	25.82	−6.7	25.4	−3.1	103.3	−2.1
The State	916	3,653	−14.2	87,124	−20.5	23.85	−7.3	24.6	−5.7	98.6	−1.0
Nebraska: Omaha	150	557	−14.2	13,089	−10.8	23.50	+3.9	32.1	+6.3	74.5	−.4
New York:											
New York City [2]	324	4,634	−.7	137,972	+.4	29.77	+1.2	(3)	(3)	(3)	(3)
Other localities [2]	242	4,688	−14.1	105,954	−12.8	22.60	+1.6	(3)	(3)	(3)	(3)
The State	566	9,322	−7.9	243,926	−5.8	26.17	+2.4	(3)	(3)	(3)	(3)
North Carolina: Charlotte	57	300	+13.2	4,656	+9.2	15.52	−3.5	26.7	−5.3	58.5	+7.3

[1] Averages computed from reports furnished by 7,471 firms.
[2] Data supplied by cooperating State bureaus.
[3] Not available.
[4] No change.
[5] Includes both Kansas City, Mo., and Kansas City, Kans.

EMPLOYMENT, PAY ROLLS, AVERAGE WEEKLY EARNINGS, AVERAGE HOURS PER WEEK PER MAN, AND AVERAGE HOURLY EARNINGS IN THE **BUILDING-CONSTRUCTION INDUSTRY** IN JANUARY 1934, AND PERCENTAGES OF CHANGE FROM DECEMBER 1933—Continued

Locality	Number of firms reporting	Employment		Pay rolls		Average weekly earnings		Average hours per week per man [1]		Average hourly earnings [1]	
		Number on pay roll January 1934	Percent of change from December 1933	Amount January 1934	Percent of change from December 1933	Amount January 1934	Percent of change from December 1933	Number January 1934	Percent of change from December 1933	Amount January 1934	Percent of change from December 1933
Ohio:										*Cents*	
Akron	83	180	−24.7	$2,958	−28.7	$16.43	−5.4	24.3	−10.0	68.8	+6.2
Cincinnati [6]	469	1,291	−15.2	28,760	−14.8	22.28	+.5	26.4	(4)	84.1	+.2
Cleveland	623	1,725	−14.3	44,567	−7.7	25.84	+7.8	26.8	+8.1	98.2	+.2
Dayton	119	344	−15.9	6,617	−5.7	19.24	+12.2	27.2	+5.4	70.6	+6.0
Youngstown	76	239	+20.7	3,769	+26.0	15.77	+4.4	21.9	+6.8	71.1	−2.6
The State	1,370	3,779	−13.8	86,671	−9.9	22.93	+4.5	26.3	+3.4	87.9	+1.3
Oklahoma:											
Oklahoma City	105	418	−11.6	7,587	−13.2	18.15	−1.8	26.9	+.7	67.8	−3.7
Tulsa	54	158	−13.2	2,881	−10.5	18.23	+23.1	25.0	+1.6	75.6	+4.9
The State	159	576	−12.1	10,468	−12.5	18.17	−.5	26.4	+.9	70.0	−1.1
Oregon: Portland	189	535	−26.8	10,431	−33.0	19.50	−8.4	25.3	−7.3	77.0	−2.9
Pennsylvania: [7]											
Erie area [2]	22	584	+17.5	3,330	+8.9	5.70	−7.3	(3)	(3)	(3)	(3)
Philadelphia area [2]	445	3,743	−14.7	72,260	−11.1	19.31	+4.3	(3)	(3)	(3)	(3)
Pittsburgh area [2]	236	1,104	−22.3	24,158	−17.0	21.88	+6.8	(3)	(3)	(3)	(3)
Reading-Lebanon area [2]	47	260	−8.1	4,494	−10.2	17.28	−2.3	(3)	(3)	(3)	(3)
Scranton area [2]	30	98	−38.4	1,896	−36.4	19.35	+3.2	(3)	(3)	(3)	(3)
Other areas [2]	303	2,029	−8.1	32,409	−17.0	15.97	−9.7	(3)	(3)	(3)	(3)
The State	1,083	7,818	−12.7	138,547	−13.7	17.72	−1.1	(3)	(3)	(3)	(3)
Rhode Island: Providence	252	1,125	−13.0	23,698	−8.5	21.06	+5.1	29.1	+4.3	73.1	+2.5
Tennessee:											
Chattanooga	33	121	−4.7	1,720	+3.0	14.21	+8.1	23.1	+6.5	59.6	+3.7
Knoxville	49	249	−13.2	3,036	−20.6	12.19	−8.5	24.5	−6.1	53.1	−.2
Memphis	80	267	+4.3	4,064	+.5	15.22	−3.6	28.4	+8.0	53.5	−9.6
Nashville	83	536	−12.4	7,560	−17.5	14.10	−5.8	26.1	−4.4	56.1	+2.7
The State	245	1,173	−8.5	16,380	−12.4	13.96	−4.3	25.9	−1.0	55.2	−.5
Texas:											
	188	534	−6.8	7,446	−5.6	13.94	+1.2	23.0	−.9	60.9	+3.7
	25	144	+60.0	1,678	+30.6	11.65	−18.4	19.5	−8.9	59.4	−9.7
						15.53	−9.3	25.4	−4.9	60.1	−4.0

The State	245	1,173	−8.5	16,380	−12.4	13.96	−4.3	25.9	−1.0	55.2	−.5
Texas:											
Dallas	188	534	−6.8	7,446	−5.6	13.94	+1.2	23.0	−.9	60.9	+3.7
El Paso	25	144	+60.0	1,678	+30.6	11.65	−18.4	19.5	−8.9	59.4	−9.7
Houston	189	776	−25.4	12,050	−32.4	15.53	−9.3	25.4	−4.9	60.1	−4.0
San Antonio	126	398	−.7	5,377	−1.6	13.51	−.9	20.9	−18.0	65.8	+27.5
The State	528	1,852	−12.0	26,551	−18.2	14.34	−7.1	23.2	−7.7	61.3	+2.9
Utah: Salt Lake City	89	177	−3.8	2,982	−13.3	16.85	−9.8	22.7	−13.7	75.0	+2.2
Virginia:											
Norfolk-Portsmouth	87	502	+7.5	8,730	+20.9	17.39	+12.4	27.4	+17.6	62.4	−1.4
Richmond	139	630	−9.6	12,581	+2.7	19.97	+13.6	30.2	+2.0	65.8	+3.9
The State	226	1,132	−2.7	21,311	+9.4	18.33	+12.6	28.8	+7.3	64.2	+1.3
Washington:											
Seattle	159	414	−25.4	7,239	−28.8	17.49	−4.6	21.2	−4.5	83.5	−.7
Spokane	56	145	−27.1	3,100	−26.6	21.38	+.8	29.0	+3.9	77.2	−1.4
Tacoma	82	295	+16.1	5,829	+49.0	19.76	+28.3	25.7	+44.4	76.5	−9.3
The State	297	854	−15.3	16,168	−11.7	18.93	+4.2	24.0	+8.2	79.7	−3.7
West Virginia: Wheeling	48	76	−30.9	1,240	−35.9	16.32	−7.2	22.2	−5.1	75.1	−1.1
Wisconsin: All localities [3]	58	706	−32.7	15,248	−16.4	21.60	+24.1	(3)	(3)	(3)	(3)

[1] Averages computed from reports furnished by 7,471 firms.
[2] Data supplied by cooperating State bureaus.
[3] Not available.
[4] No change.
[6] Includes Covington and Newport, Ky.
[7] Each separate area includes from 2 to 8 counties.

Trend of Employment in January 1934, by States

FLUCTUATIONS in employment and pay-roll totals, in January 1934 as compared with December 1933, in certain industrial groups are shown by States in the table following. These tabulations have been prepared from data secured directly from reporting establishments and from information supplied by cooperating State agencies. The combined total of all groups does not include building-construction data, information concerning which is shown by city and State totals under the section "Building construction." In addition to the combined total of all groups, the trend of employment and pay rolls in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous-coal mining, crude-petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundry, and dyeing and cleaning groups is presented. In this State compilation, the totals of the telephone and telegraph, power and light, and electric-railroad operation groups have been combined and are presented as one group—public utilities. Due to the extreme seasonal fluctuations in the canning and preserving industry, and the fact that during certain months the activity in this industry in a number of States is negligible, data for this industry are not presented separately. The number of employees and the amount of weekly pay roll in December 1933 and January 1934 as reported by identical establishments in this industry are included, however, in the combined total of "all groups."

The percentages of change shown in the accompanying table, unless otherwise noted, are unweighted; that is, the industries included in the groups, and the groups comprising the total of all groups, have not been weighted according to their relative importance in the combined totals.

The State totals for the anthracite-mining industry, which is confined entirely to the State of Pennsylvania, will be found in table 1, nonmanufacturing industries.

When the identity of any reporting company would be disclosed by the publication of a State total for any industrial group, figures for the group do not appear in the separate industrial-group tabulation, but are included in the State totals for "all groups." Data are not presented for any industrial group when the representation in the State covers less than three establishments.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Total—all groups					Manufacturing				
		Employment		Pay roll (1 week)			Employment		Pay roll (1 week)	
	Number of establishments	Number on pay roll, January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933	Number of establishments	Number on pay roll, January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	529	64,992	−2.4	$856,132	−3.5	209	46,207	−1.1	$586,918	−2.3
Arizona	393	9,126	+.8	181,944	+2.4	42	1,792	−7.9	32,305	−8.9
Arkansas	[1] *422*	*18,182*	*+.7*	*253,624*	*+3.4*	*178*	*12,487*	*+.8*	*158,521*	*+1.3*
California	[2] *1,879*	*246,507*	*−3.9*	*5,896,822*	*−2.2*	*1,101*	*135,450*	*−2.3*	*3,050,851*	*−1.8*
Colorado	814	31,944	−12.3	640,297	−13.1	118	11,358	−23.3	215,474	−25.7
Connecticut	1,074	147,380	−2.9	2,790,203	−3.2	610	126,476	−2.8	2,246,618	−3.6
Delaware	156	9,608	−6.4	200,319	−7.6	46	6,528	−7.4	124,428	−10.6
Dist. of Columbia	605	32,648	−9.8	750,390	−7.2	49	3,149	−10.0	100,305	−14.6
Florida	652	31,156	+5.8	486,249	+1.7	128	12,918	−9.7	175,880	−12.9
Georgia	995	89,534	+.5	1,190,934	+1.2	305	71,878	+1.3	849,919	+3.0
Idaho	226	9,736	+.2	162,927	−9.8	33	4,848	−1.9	73,779	−13.9
Illinois	[3] *1,762*	*328,448*	*−2.4*	*6,907,624*	*−.8*	*1,105*	*206,195*	*−2.2*	*4,003,125*	+ [4]
Indiana	1,275	125,636	−2.4	2,282,065	−1.9	546	94,365	−.4	1,659,178	−.4
Iowa	1,160	46,673	−.4	875,187	+.5	404	24,216	−.9	444,079	−.9
Kansas	[5] *1,459*	*67,704*	*−2.5*	*1,490,767*	*−2.8*	*439*	*25,702*	*−1.0*	*530,596*	*−2.3*
Kentucky	863	62,608	−6.3	1,008,947	−3.9	192	21,844	−9.5	348,699	−12.2
Louisiana	469	32,356	−4.2	522,961	−2.4	191	19,479	−4.9	272,608	−1.3
Maine	527	45,567	+1.2	777,176	+2.4	175	39,208	+2.2	644,712	+3.9
Maryland	*1,006*	*91,335*	*−5.2*	*1,773,721*	*−5.9*	*633*	*64,393*	[6] *−2.7*	*1,176,294*	[6] *−3.9*
Massachusetts	[5] *7,989*	*362,189*	*−4.0*	*7,547,725*	*−1.9*	*1,131*	*186,310*	*−.9*	*3,455,420*	*+.5*
Michigan	1,650	328,591	+11.3	6,993,219	+15.7	*773*	*298,740*	*+15.3*	*6,335,852*	*+22.7*
Minnesota	1,066	66,216	−5.2	1,361,030	−5.4	273	29,648	−2.3	572,133	−5.8
Mississippi	348	9,699	−1.5	128,100	+1.2	64	6,132	+1.7	72,407	+4.9
Missouri	1,195	107,778	−2.7	2,158,844	−1.6	498	56,320	+.3	1,027,572	+.5
Montana	335	9,898	−3.7	215,699	−8.6	50	3,386	−5.5	57,860	−21.8
Nebraska	724	22,410	−8.8	476,755	−5.1	117	10,547	−13.7	225,355	−9.9
Nevada	132	1,652	−.1	41,134	−.2	19	233	−1.7	5,498	−4.4
New Hampshire	472	36,373	+3.3	616,641	+7.7	177	32,128	+4.9	519,969	+9.5
New Jersey	1,536	206,250	−3.3	4,499,418	−4.1	[7] *698*	*190,476*	*−2.9*	*3,925,329*	*−4.5*
New Mexico	189	4,917	+.7	88,900	−4.2	20	548	+10.0	8,972	+1.6
New York	7,740	538,204	−5.1	13,369,415	−2.7	[8] *1,815*	*345,884*	*−.6*	*7,881,065*	*+1.0*
North Carolina	909	135,129	−.6	1,612,702	−5.6	549	129,332	−.7	1,518,325	−6.0
North Dakota	337	4,312	−.3	87,766	+.8	58	852	−4.4	17,497	−.2
Ohio	4,973	406,996	−3.2	7,792,807	−2.9	1,784	292,567	−1.2	5,358,370	−1.7
Oklahoma	844	31,349	−2.1	616,443	−2.5	149	10,373	−3.6	184,158	−5.9
Oregon	700	27,416	−7.6	538,688	−7.9	151	15,256	−12.0	261,738	−15.0
Pennsylvania	4,864	649,778	−1.9	13,405,214	+4.5	*1,748*	*361,102*	*−4.4*	*6,096,666*	*−7.0*
Rhode Island	867	56,112	+3.1	1,030,132	+3.6	248	43,719	+5.9	738,346	+6.9
South Carolina	419	55,856	−1.4	706,926	+.6	166	51,173	−1.2	636,462	+.6
South Dakota	259	6,353	−2.6	150,912	−2.9	44	2,336	+.3	46,150	−3.6
Tennessee	711	63,549	−4.5	932,971	−6.1	248	45,699	−4.4	629,198	−7.7
Texas	*744*	*63,635*	*−1.1*	*1,387,012*	*−1.4*	*377*	*37,471*	*+1.2*	*759,886*	*+.2*
Utah	334	15,626	−1.0	285,777	−8.6	74	6,403	+.7	92,438	−19.0
Vermont	374	8,607	−8.9	157,208	−8.4	109	4,227	−11.9	75,758	−11.9
Virginia	1,236	80,850	−.9	1,341,121	−.5	379	59,034	−.3	923,839	−.4
Washington	1,107	53,111	−9.7	1,073,340	−7.3	249	28,291	−6.2	507,782	−8.0
West Virginia	864	120,058	−1.1	2,209,004	+.1	171	44,365	−.9	819,415	−.6
Wisconsin	[9] *1,048*	*144,461*	*−3.0*	*2,545,588*	*−1.4*	*774*	*116,857*	[6] *−1.0*	*1,981,594*	[6] *−1.9*
Wyoming	191	5,857	−5.5	132,931	−13.3	25	1,137	−19.1	28,441	−18.5

[1] Includes automobile dealers and garages, and sand, gravel, and building construction.
[2] Includes banks, insurance, and office employment.
[3] Includes building and contracting.
[4] Less than one tenth of 1 percent.
[5] Includes construction, municipal, agricultural, and office employment, amusement and recreation professional, and transportation services.
[6] Weighted percent of change.
[7] Includes laundries.
[8] Includes laundering and cleaning.
[9] Includes construction but does not include hotels and restaurants, and public works.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN IDENTICAL ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Wholesale trade					Retail trade				
		Employment		Pay roll (1 week)			Employment		Pay roll (1 week)	
	Number of establishments	Number on pay roll, January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933	Number of establishments	Number on pay roll, January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	15	635	−0.8	$16,431	−6.9	66	2,136	−18.7	$35,494	−15.5
Arizona	24	232	+5.5	5,753	+4.4	178	1,881	−10.5	29,050	−6.1
Arkansas	*23*	*638*	*−34.7*	*16,105*	*−24.6*	*119*	*1,608*	*+13.5*	*19,919*	*+43.8*
California	*96*	*5,373*	*−.1*	*149,487*	*+.4*	*123*	*24,553*	*−22.6*	*522,384*	*−16.1*
Colorado	25	838	+.5	22,420	−2.1	267	4,265	−15.9	82,590	−11.3
Connecticut	51	998	+4.0	29,006	+4.3	121	5,019	−12.6	101,656	−6.5
Delaware	8	117	−2.5	2,476	+1.6	33	575	−12.2	12,238	−8.9
Dist. of Columbia	35	796	−1.0	23,792	−2.9	389	11,583	−21.6	234,877	−15.5
Florida	79	1,317	+6.1	30,856	+7.2	92	2,508	+1.8	47,250	+6.1
Georgia	35	644	−1.2	16,251	−2.3	355	4,533	−13.3	70,022	−10.0
Idaho	10	130	−2.3	3,348	−1.4	62	1,015	+13.7	14,832	+4.3
Illinois	*48*	*2,289*	*−1.2*	*54,331*	*−1.8*	*173*	*23,533*	*−16.9*	*483,469*	*−11.7*
Indiana	75	1,654	−.1	38,980	+2.1	188	6,493	−24.8	116,927	−19.0
Iowa	38	1,122	−1.1	27,953	+1.2	109	3,096	−16.0	58,849	−4.4
Kansas	*110*	*2,330*	*−3.5*	*53,737*	*−4.5*	*537*	*6,980*	*−11.0*	*119,649*	*−5.7*
Kentucky	20	382	+.3	7,851	−.6	78	3,349	−23.9	58,261	−16.4
Louisiana	25	638	−1.5	14,577	−3.3	36	3,018	−15.2	44,112	−16.9
Maine	17	413	−1.9	9,789	−.7	62	1,053	−10.5	20,841	−4.8
Maryland	*141*	*2,057*	*−.4*	*48,935*	*+.3*	*45*	*7,326*	*−30.0*	*126,143*	*−27.1*
Massachusetts	*698*	*15,172*	*−.9*	*391,188*	*−.9*	*4,149*	*64,666*	*−13.8*	*1,266,800*	*−9.7*
Michigan	69	3,012	−.2	69,603	−4.0	157	11,875	−27.5	242,209	−18.0
Minnesota	78	5,358	−.4	133,663	−2.0	230	8,177	−16.8	137,430	−12.3
Mississippi	4	122	−3.2	2,299	−3.6	29	386	−29.7	3,990	−16.6
Missouri	60	4,811	−2.7	124,468	−1.7	138	10,118	−21.8	187,133	−18.9
Montana	11	212	−1.4	6,419	−.5	79	844	−15.3	17,341	−7.3
Nebraska	32	992	−4.5	25,972	+1.5	185	1,920	−15.2	35,013	−8.2
Nevada	8	112	−.9	3,551	+3.6	38	249	−6.7	5,583	−9.1
New Hampshire	11	154	−.6	4,027	+1.1	70	828	−28.1	13,242	−13.8
New Jersey	24	659	+1.2	18,292	+1.6	417	7,938	−29.7	174,325	−23.8
New Mexico	6	78	−1.3	2,507	−10.7	48	244	([10])	5,609	−5.1
New York	442	13,308	−1.5	397,512	−2.4	3,914	84,521	−22.3	1,950,158	−15.8
North Carolina	14	164	−3.0	3,677	+2.7	157	698	−3.7	13,034	−4.5
North Dakota	17	270	−2.9	6,932	−5.2	9	271	−13.7	3,939	−15.0
Ohio	223	5,198	−1.3	127,210	−1.6	1,688	35,687	−22.2	665,514	−16.0
Oklahoma	53	1,042	−.2	24,237	+4.8	169	2,879	−6.2	51,549	−4.8
Oregon	43	1,002	−5.7	27,121	+ ([4])	194	2,249	−5.7	43,260	−6.8
Pennsylvania	122	3,527	−.7	92,900	−1.0	354	29,498	−20.5	580,730	−16.8
Rhode Island	40	1,139	−7.5	27,919	−5.5	468	5,340	−11.2	99,715	−6.8
South Carolina	13	182	−2.2	3,853	+4.3	115	1,298	−17.5	15,884	−4.3
South Dakota	10	123	−3.1	3,248	−1.4	9	140	+12.0	2,427	+10.2
Tennessee	31	645	−2.1	12,351	−3.0	51	3,520	−24.0	57,255	−17.5
Texas	*112*	*2,861*	*−1.7*	*72,306*	*+2.8*	*77*	*6,824*	*−11.4*	*114,106*	*−10.9*
Utah	14	495	−1.0	12,222	−1.6	71	558	−9.3	13,003	−3.1
Vermont	5	116	−.9	2,685	−.9	37	384	−27.3	6,270	−21.3
Virginia	43	1,132	−2.2	26,189	−1.9	477	5,174	−17.6	97,041	−11.8
Washington	100	1,922	−4.2	51,726	−2.3	356	5,641	−30.4	106,792	−19.7
West Virginia	25	534	−.9	13,564	−.6	52	877	−21.2	15,441	−12.7
Wisconsin	*46*	*906*	*+.2*	*31,017*	*+4.8*	*51*	*10,208*	*−22.5*	*144,174*	*−17.3*
Wyoming	8	60	−1.6	1,684	−1.9	39	253	−2.3	5,440	−2.5

[4] Less than one tenth of 1 percent.

[10] No change.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Employment			Pay roll (1 week)		Employment			Pay roll (1 week)	
	Number of establishments	Number on pay roll, January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933	Number of establishments	Number on pay roll, January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	17	657	−17.7	$6,860	−27.7	10	1,161	−28.8	$15,373	−31.3
Arizona	3	36	+2.9	501	+13.9	21	2,376	+3.6	57,511	+5.1
Arkansas	9	202	−15.5	2,565	−16.2	3	379	−.5	4,950	−.6
California	34	603	−9.7	11,022	−11.0	*35*	*2,691*	−.7	*66,298*	*+3.5*
Colorado	5	28	−6.7	326	+2.2	17	1,040	−.6	28,552	+3.5
Connecticut	25	202	−16.5	3,335	−11.9					
Delaware	3	52	−13.3	752	−7.2					
Dist. of Columbia										
Florida	16	901	−.3	11,294	+2.2					
Georgia	26	1,300	+2.8	12,045	+2.8					
Idaho						10	2,120	−1.3	43,062	−13.2
Illinois	21	496	−6.1	8,384	−7.0					
Indiana	64	1,062	−12.7	13,472	−25.3					
Iowa	28	307	−10.8	4,425	−8.2					
Kansas	*29*	*1,000*	*−.6*	*18,260*	*−4.1*	*14*	*932*	*−3.8*	*20,965*	*+2.3*
Kentucky	34	669	−29.9	7,179	−30.4					
Louisiana	7	601	−.3	7,883	−13.5					
Maine	10	90	−78.7	1,666	−73.9					
Maryland	*14*	*190*	*−10.4*	*2,255*	*−11.0*					
Massachusetts	19	247	−22.1	4,747	−22.7					
Michigan	45	645	−41.1	9,663	−37.4	32	3,828	+2.7	55,822	−1.1
Minnesota	26	227	−30.6	3,189	−36.1	31	1,109	−14.1	19,190	−15.6
Mississippi	10	172	−16.9	2,232	−10.7					
Missouri	47	934	−29.8	11,663	−33.5	14	1,689	−1.9	23,146	+1.4
Montana	9	45	+2.3	679	+4.9	18	2,436	−1.5	68,837	−2.0
Nebraska	10	51	−38.6	792	−19.3					
Nevada						14	467	+4.5	12,106	+5.7
New Hampshire	10	68	−28.4	1,250	−13.5					
New Jersey	39	529	−21.3	7,900	−20.3	3	14	−17.6	285	−15.9
New Mexico						5	918	−.6	17,707	−.7
New York	74	1,594	−8.3	34,257	−.1					
North Carolina	14	373	−3.1	4,113	−12.7					
North Dakota										
Ohio	145	2,927	−6.5	43,608	−1.8					
Oklahoma	16	151	−35.2	1,285	−25.1	32	1,493	−3.8	23,745	−7.7
Oregon	5	45	−27.4	776	−30.5	6	50	−28.6	953	−26.4
Pennsylvania	157	3,636	−13.5	44,191	−13.3					
Rhode Island										
South Carolina	7	102	−13.6	1,042	+5.8					
South Dakota	7	72	−59.1	1,064	−44.4					
Tennessee	24	1,325	+.8	17,673	+3.0	4	278	−10.6	5,704	−2.0
Texas	*21*	*979*	*+55.2*	*17,725*	*+43.6*					
Utah	6	125	−18.8	2,315	−6.3	12	2,051	+.8	42,272	+2.2
Vermont	38	1,987	−2.6	34,385	−4.1					
Virginia	27	1,015	+5.3	8,293	+5.5					
Washington	12	126	−20.3	1,998	−30.5					
West Virginia	22	731	−12.1	8,087	−15.0					
Wisconsin	*14*	*131*	*−9.0*	*2,133*	*−2.8*	(11)	*217*	*−6.1*	*4,108*	*−18.5*
Wyoming										

[11] Not available.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Bituminous-coal mining					Crude-petroleum producing				
		Employment		Pay roll (1 week)			Employment		Pay roll (1 week)	
	Number of establishments	Number on pay roll, January 1934	Percent of change	Amount, January 1934	Percent of change from December 1933	Number of establishments	Number on pay roll January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	54	9,424	−0.4	$122,342	−0.6					
Arizona										
Arkansas	*3*	*116*	*+17.2*	(11)		8	372	+7.2	$8,362	+7.3
California						41	8,516	−.4	267,904	+5.5
Colorado	47	5,129	−1.1	82,751	−8.9					
Connecticut										
Delaware										
Dist. of Columbia										
Florida										
Georgia										
Idaho										
Illinois	*36*	*8,885*	*+4.7*	*170,386*	*+4.5*	8	204	−6.0	4,291	−5.7
Indiana	49	5,735	+1.0	124,375	+1.4	4	33	−2.9	659	−4.4
Iowa	20	2,081	+2.0	38,863	+8.0					
Kansas	*21*	*1,762*	*+18.3*	*28,882*	*+4.0*	28	1,727	+4.5	38,633	+3.9
Kentucky	146	25,681	−1.8	374,676	+6.7	5	62	−6.1	1,022	+3.4
Louisiana						10	271	+6.3	6,366	+6.2
Maine										
Maryland	*17*	*1,557*	*+2.4*	*25,641*	*−8.5*					
Massachusetts										
Michigan	3	885	+.1	19,345	+2.6					
Minnesota										
Mississippi										
Missouri	21	1,936	+4.9	29,217	+13.2					
Montana	11	933	−1.8	20,958	−10.0	4	32	−3.0	636	+4.1
Nebraska										
Nevada										
New Hampshire										
New Jersey										
New Mexico	14	1,837	−.1	31,589	−9.7	5	62	−1.6	1,788	+4.1
New York						3	89	+12.7	2,074	+.5
North Carolina										
North Dakota	9	785	+8.9	16,844	+11.5					
Ohio	78	13,350	+4.2	251,354	+5.9	5	43	−2.3	540	−4.8
Oklahoma	19	941	+5.0	14,837	−1.0	60	5,744	+.2	140,192	−(1)
Oregon										
Pennsylvania	476	71,396	−1.1	1,269,126	−.7	20	925	+.2	19,866	+.3
Rhode Island										
South Carolina										
South Dakota										
Tennessee	21	2,949	+4.4	37,627	+7.2					
Texas	5	355	+.9	5,194	−8.8	*3*	*6,563*	*−8.7*	*216,572*	−7.7
Utah	17	2,170	−.9	49,482	−5.1					
Vermont										
Virginia	26	4,137	+28.7	66,248	+22.4					
Washington	11	1,378	+3.8	29,087	−13.7					
West Virginia	363	64,678	−.7	1,152,079	+.9	8	399	−1.7	8,355	−2.2
Wisconsin										
Wyoming	32	3,393	−.9	74,548	−14.9	7	162	−8.5	4,517	−5.1

(1) Less than one tenth of 1 percent.

(11) Not available.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Public utilities					Hotels				
		Employment		Pay roll (1 week)			Employment		Pay roll (1 week)	
	Number of establishments	Number on pay roll January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933	Number of establishments	Number on pay roll January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	89	1,759	−0.6	$37,316	+1.3	26	1,343	+3.9	$11,222	+3.9
Arizona	67	1,573	+4.3	38,048	+9.2	21	723	+58.9	9,288	+38.1
Arkansas	*53*	*1,863*	+.1	*39,715*	*+9.3*	*13*	*721*	*+21.4*	*6,578*	*+35.6*
California	*47*	*43,091*	*+.1*	*1,195,462*	*+1.0*	*166*	*9,265*	*+2.8*	*142,803*	*+1.7*
Colorado	196	5,368	−1.0	132,901	−1.5	52	1,296	+1.9	17,658	+2.5
Connecticut	132	9,724	+.9	292,280	−.1	25	1,197	−.5	14,932	−2.1
Delaware	28	1,070	−4.1	29,125	−7.0	6	261	([10])	3,615	([10])
Dist. of Columbia	21	8,569	−1.1	231,032	−.2	44	4,290	+2.2	62,856	+1.3
Florida	184	4,566	+2.3	111,024	−1.4	91	3,996	+103.7	43,371	+107.6
Georgia	186	6,503	−.2	173,979	−2.9	26	1,241	+25.7	10,741	+39.1
Idaho	56	767	−.8	15,308	+.9	20	369	+7.6	4,126	+2.6
Illinois	*82*	*70,986*	*+.5*	*1,908,522*	*+.4*	[12] *52*	*10,725*	*+10.6*	*166,267*	*+8.7*
Indiana	131	9,155	+.3	218,425	−.1	74	2,775	+([4])	29,199	+4.6
Iowa	432	10,934	+6.5	226,336	+2.5	64	2,516	+.6	24,158	+6.3
Kansas	[13] *149*	7,447	−.7	*176,006*	*+.1*	*27*	*711*	*+3.6*	*7,269*	*+.9*
Kentucky	293	6,237	−.4	141,569	−.4	35	1,975	+.7	20,263	+.6
Louisiana	147	5,448	−.3	135,838	−.7	24	1,864	+7.7	20,202	+11.3
Maine	168	2,778	+3.2	70,632	+.3	20	696	−.7	8,755	+.3
Maryland	*94*	*12,449*	*+.1*	*347,478*	*+.3*	*24*	*1,371*	*−.3*	*16,205*	*+.7*
Massachusetts	*130*	*45,175*	*−.1*	*1,272,039*	*−.1*	*80*	*5,065*	*+.1*	*73,097*	*+4.8*
Michigan	416	22,799	+.4	656,325	−1.1	100	4,730	+.2	56,597	+.9
Minnesota	231	12,277	−1.7	308,287	−1.5	77	3,322	+.9	38,275	+2.1
Mississippi	190	1,679	−4.6	34,966	−1.7	18	492	+12.1	3,247	+4.0
Missouri	179	19,170	−.4	506,674	+.9	89	4,886	+3.5	59,266	+7.4
Montana	86	929	+1.5	23,262	+3.7	26	381	+3.8	4,879	+3.1
Nebraska	299	5,591	−([4])	139,203	+.3	44	1,800	−7.7	17,873	+1.1
Nevada	37	400	+3.6	10,986	+2.1	11	127	−8.0	2,039	−12.0
New Hampshire	140	2,292	+1.0	59,033	−.5	10	166	−1.8	2,074	−2.8
New Jersey	197	12,884	+2.2	381,301	+4.4	58	3,570	−6.8	42,932	−4.6
New Mexico	53	557	−1.4	11,478	−1.1	14	329	+4.4	3,378	+4.9
New York	831	98,343	+([4])	3,007,017	−.1	52	4,690	+8.1	66,654	+11.7
North Carolina	96	1,731	−1.3	36,909	+1.7	36	1,462	+8.1	12,818	+15.5
North Dakota	171	1,228	+.6	29,183	+.5	23	424	+4.4	3,786	+1.5
Ohio	474	34,014	+.4	880,322	−1.5	145	9,183	+1.5	112,377	+1.2
Oklahoma	245	5,939	−.6	133,610	−.3	56	1,294	+2.9	12,862	+.9
Oregon	177	5,496	+1.1	139,859	+3.7	58	1,174	+3.0	14,250	+.6
Pennsylvania	*675*	*48,285*	*−.1*	*1,323,717*	*−.2*	164	9,542	+1.6	122,320	+3.4
Rhode Island	42	3,367	+.8	96,041	−1.5	13	200	+7.0	2,552	+11.3
South Carolina	70	1,607	−3.8	33,340	−2.5	19	612	+42.0	5,288	+35.6
South Dakota	129	975	−4.7	24,168	−2.6	18	291	−2.3	3,339	−7.8
Tennessee	245	4,578	+1.4	102,009	+1.6	36	2,164	+3.2	18,030	+1.6
Texas	*117*	*6,579*	*+.9*	*176,963*	*+.6*	*37*	*2,358*	*−.1*	*29,454*	*+3.0*
Utah	69	1,797	−2.3	36,431	−1.9	12	461	+.7	5,972	+4.4
Vermont	122	1,074	−3.4	25,473	−2.4	24	475	−6.9	4,557	−7.6
Virginia	178	5,863	−.4	141,463	+.9	34	1,847	−3.6	18,739	−5.4
Washington	196	9,763	+1.2	268,464	+3.5	79	2,464	+1.9	28,379	+1.7
West Virginia	120	5,968	−1.2	153,526	+.9	37	1,127	+1.7	11,802	+.7
Wisconsin	[14] *41*	*10,536*	*−.1*	*296,238*	*+.5*	[13] *43*	*1,354*	*+6.1*	([11])	
Wyoming	48	451	−.4	10,241	−1.9	10	107	−5.3	1,401	−7.8

[4] Less than one tenth of 1 percent.
[10] No change.
[11] Not available.
[12] Includes restaurants.
[13] Includes steam railroads.
[14] Includes railways and express.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES—Continued

Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Laundries					Dyeing and cleaning				
		Employment		Pay roll (1 week)			Employment		Pay roll (1 week)	
	Number of establishments	Number on pay roll January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933	Number of establishments	Number on pay roll January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	17	930	+0.1	$8,027	+1.3	4	99	+1.0	$1,059	−1.5
Arizona	10	289	+5.5	3,703	+4.8					
Arkansas	*12*	*341*	*+4.9*	*3,383*	*+4.1*					
California	[15] *68*	*5,149*	*+.9*	*91,772*	*+.2*					
Colorado	33	1,254	−4.3	16,078	−4.5	10	140	−2.8	2,390	−3.4
Connecticut	44	1,671	−1.9	26,705	−1.2	9	189	−2.6	4,152	+4.7
Delaware	3	233	+.4	4,101	+2.3	3	55	+7.8	1,103	+36.7
Dist. of Columbia	21	2,768	−.1	43,237	−1.1	6	164	−5.2	3,144	−3.2
Florida	18	976	+10.9	10,851	+23.5	9	108	+13.7	1,809	+18.3
Georgia	25	2,164	+1.2	23,370	+2.9	3	88	+1.1	1,000	−1.8
Idaho	18	348	+1.2	5,328	+2.1					
Illinois	[15] *28*	*1,814*	*−.2*	*24,866*	*−.3*					
Indiana	42	1,550	−.7	20,283	+1.2	9	143	−10.1	2,214	−10.8
Iowa	32	1,058	−.4	14,533	+3.1	4	54	+1.9	1,013	+2.0
Kansas	[15] *39*	*927*	*+3.0*	*12,423*	*+1.4*					
Kentucky	30	1,272	−.9	15,396	−.1	5	159	−2.5	2,396	−1.5
Louisiana	7	439	−.7	4,397	−2.4	5	80	−2.4	909	−3.4
Maine	24	521	−1.3	7,532	−1.6					
Maryland	*23*	*1,767*	*−.7*	*27,010*	*+1.8*	*15*	*225*	*−5.9*	*3,780*	*−3.9*
Massachusetts	*114*	*3,757*	*−1.1*	*60,836*	*−1.0*	*80*	*1,751*	*−2.3*	*28,884*	*+5.4*
Michigan	56	2,520	+.1	34,746	+3.1	13	367	[10]	7,328	+4.7
Minnesota	37	1,415	−.3	21,054	−1.4	9	322	−.9	5,227	−.7
Mississippi	12	419	−.5	3,910	−2.8					
Missouri	47	2,621	+3.8	34,629	+5.0	11	398	−5.9	6,680	−4.3
Montana	15	418	[10]	7,071	−.3	3	19	−5.0	431	−.2
Nebraska	13	717	+11.5	9,835	+17.6	3	94	[10]	1,782	+6.0
Nevada	3	35	−5.4	608	−1.3					
New Hampshire	13	244	−1.2	3,656	−1.8					
New Jersey	37	3,669	−1.3	69,727	+1.3	7	186	−3.1	4,346	−3.1
New Mexico	6	211	−3.7	2,934	−4.3					
New York	67	6,714	−.2	116,390	−.6	15	470	−.4	8,497	−[9]
North Carolina	12	701	−.3	7,693	+1.5	4	59	−9.2	731	−11.3
North Dakota	10	194	−1.5	2,822	+.4					
Ohio	73	3,807	+2.1	57,998	+3.2	35	1,400	−1.1	24,537	+.2
Oklahoma	15	727	−2.8	9,395	+.4	7	162	+3.8	2,242	+2.1
Oregon	9	271	−1.1	4,074	−2.0	3	41	−2.4	765	−2.0
Pennsylvania	40	2,762	−.7	42,072	−.2	18	859	−10.4	14,668	−6.8
Rhode Island	19	1,009	−1.1	16,664	+.9	4	266	+1.1	4,258	−.8
South Carolina	9	433	+3.1	4,240	+2.2					
South Dakota	8	182	−2.2	2,421	+4.9					
Tennessee	14	1,234	+2.0	11,526	+1.6	3	30	−3.2	341	−5.5
Texas	19	964	−2.2	10,301	−4.9	12	354	+.6	5,939	+[9]
Utah	11	633	−1.7	8,800	−5.3	8	105	−7.9	1,840	−6.8
Vermont	6	87	+1.2	1,028	−5.2					
Virginia	18	983	−3.2	11,506	+2.7	19	230	−.9	3,235	−.1
Washington	15	586	+2.8	9,558	+3.7	9	110	−4.3	2,055	−1.2
West Virginia	16	593	+.2	7,530	+2.5	8	210	[10]	2,801	+1.2
Wisconsin	[15] *28*	*925*	*+.5*	*11,736*	*−2.4*					
Wyoming	6	132	−.8	2,122	+.9					

[9] Less than one tenth of 1 percent. [10] No change. [15] Includes dyeing and cleaning.

COMPARISON OF EMPLOYMENT AND PAY ROLLS IN **IDENTICAL** ESTABLISHMENTS IN DECEMBER 1933 AND JANUARY 1934, BY STATES—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Banks, brokerage, insurance, and real estate				
	Number of establishments	Employment		Pay roll (1 week)	
		Number on pay roll January 1934	Percent of change from December 1933	Amount, January 1934	Percent of change from December 1933
Alabama	19	479	(10)	$13,714	−0.8
Arizona	25	197	+3.1	5,321	+4.7
Arkansas	20	249	−.4	6,163	+2.3
California	1,122	22,751	−.4	759,902	+1.8
Colorado	29	1,011	+.9	35,326	−(4)
Connecticut	56	1,893	−1.7	71,284	−1.1
Delaware	16	567	−.4	20,890	+5.8
District of Columbia	40	1,329	−.1	51,147	+6.3
Florida	17	585	+2.5	17,865	−3.2
Georgia	28	1,125	+.8	33,062	−.9
Idaho	14	125	−1.6	3,097	−4.7
Illinois	92	10,846	+1.3	380,155	−.3
Indiana	43	1,215	−6.5	42,227	−2.3
Iowa	14	956	−.4	31,068	+1.0
Kansas	[16] *33*	*776*	*−2.1*	*23,718*	*−3.2*
Kentucky	21	828	−1.0	29,630	−1.8
Louisiana	10	385	(10)	14,734	+.6
Maine	15	224	+1.4	6,122	+7.3
Maryland	24	857	+.2	39,493	+23.5
Massachusetts	[16] *273*	*7,405*	*+1.1*	*217,757*	*+.6*
Michigan	91	4,202	+3.2	142,637	+2.7
Minnesota	52	4,022	−14.1	118,514	−8.2
Mississippi	17	206	+4.6	4,431	+1.3
Missouri	85	4,699	−.3	144,534	−1.0
Montana	21	245	+.4	6,877	−1.2
Nebraska	18	531	−1.1	18,939	+1.2
Nevada					
New Hampshire	40	484	+1.7	13,231	+15.7
New Jersey	127	12,765	+.5	374,323	+3.0
New Mexico	16	126	+5.0	2,854	+4.6
New York	726	53,455	−.3	1,906,780	+.3
North Carolina	26	574	+1.1	15,102	+2.2
North Dakota	37	264	−2.2	6,348	−1.9
Ohio	269	7,597	−.1	254,066	−3.1
Oklahoma	23	604	−.8	18,331	+1.0
Oregon	32	1,190	−.3	38,286	−3.3
Pennsylvania	*722*	*22,238*	*+.4*	*688,688*	*−.3*
Rhode Island	31	1,062	−.1	44,475	−4.3
South Carolina	11	118	(10)	3,276	+.7
South Dakota	32	241	−.8	5,919	−1.8
Tennessee	33	1,126	−.7	41,241	−1.3
Texas	30	1,480	+.3	40,962	−.4
Utah	15	473	+1.5	16,363	−5.7
Vermont	30	230	−1.3	6,635	−.2
Virginia	31	1,353	−.4	43,846	−1.7
Washington	40	1,597	+4.6	49,932	+4.9
West Virginia	42	576	+.7	16,404	+.3
Wisconsin	17	919	+.1	33,334	+5.2
Wyoming	12	111	(10)	3,381	−.1

[4] Less than one tenth of 1 percent. [10] No change. [16] Does not include brokerage and real estate.

Employment and Pay Rolls in January 1934 in Cities of Over 500,000 Population

FLUCTUATIONS in employment and pay-roll totals in January 1934 as compared with December 1933 in 13 cities of the United States having a population of 500,000 or over are presented in the following table. These changes are computed from reports received from identical establishments in each of the months considered.

In addition to including reports received from establishments in the several industrial groups regularly covered in the Bureau's survey, excluding building construction, reports have also been secured from other establishments in these cities for inclusion in these totals. Information concerning employment in building construction is not available for all cities at this time and therefore has not been included.

FLUCTUATIONS IN EMPLOYMENT AND PAY ROLLS IN JANUARY 1934 AS COMPARED WITH DECEMBER 1933

Cities	Number of establishments reporting in both months	Employment			Pay roll (1 week)		
		Number on pay roll		Percent of change December 1933–January 1934	Amount		Percent of change December 1933–January 1934
		December 1933	January 1934		December 1933	January 1934	
New York City	4,746	338,403	315,958	−6.6	$9,001,293	$8,652,094	−3.9
Chicago, Ill	1,814	231,206	226,695	−2.0	5,416,161	5,397,408	−0.3
Philadelphia, Pa	804	150,217	141,656	−5.7	3,286,828	3,111,773	−5.3
Detroit, Mich	543	177,874	210,738	+18.5	3,766,269	4,653,215	+23.5
Los Angeles, Calif	821	78,422	73,861	−5.8	1,822,622	1,766,509	−3.1
Cleveland, Ohio	1,101	98,410	95,261	−3.2	1,973,133	1,906,283	−3.4
St. Louis, Mo	501	67,005	64,701	−3.4	1,378,720	1,360,243	−1.3
Baltimore, Md	577	54,040	49,553	−8.3	1,058,910	991,996	−6.3
Boston, Mass	3,515	91,103	88,210	−3.2	2,198,219	2,163,272	−1.6
Pittsburgh, Pa	404	57,539	53,609	−6.8	1,187,186	1,124,995	−5.2
San Francisco, Calif	1,126	49,475	47,680	−3.6	1,189,100	1,152,311	−3.1
Buffalo, N.Y	404	37,823	37,418	−1.1	869,697	882,722	+1.5
Milwaukee, Wis	439	43,691	41,550	−4.9	860,536	808,127	−6.1

Employment in the Various Branches of the Federal Government, January 1934

DURING the month of January 1934 there were 591,113 employees on the pay rolls of the executive departments of the United States Government. This is an increase of 27,952 employees or 5 percent as compared with January 1933, and a decrease of 562 employees or 0.1 percent as compared with December 1933.

The information shown in table 1 is compiled by the various departments and officers of the United States Government and sent to the United States Civil Service Commission where it is assembled. The figures are tabulated by the Bureau of Labor Statistics.

Table 1 shows the number of employees in executive departments of the Federal Government in the District of Columbia, the number

outside the District of Columbia, and the total number of such employees.

Approximately 13 percent of the workers in the executive branch of the United States Government are located in Washington.

TABLE 1.—EMPLOYEES IN THE EXECUTIVE SERVICE OF THE UNITED STATES JANUARY AND DECEMBER 1933 AND JANUARY 1934

Item	District of Columbia			Outside the District			Entire service		
	Permanent [1]	Temporary [2]	Total	Permanent [1]	Temporary [2]	Total	Permanent [1]	Temporary [2]	Total
Number of employees:									
January 1933	64,086	2,714	66,800	469,080	27,281	496,361	533,166	29,995	563,161
December 1933	66,894	8,556	75,450	463,618	52,607	516,225	530,512	61,163	591,675
January 1934	69,808	8,237	78,045	467,570	45,498	513,068	537,378	53,735	591,113
Gain or loss:									
January 1933–January 1934	+5,722	+5,523	+11,245	−1,510	+18,217	+16,707	+4,212	+23,740	+27,952
December 1933–January 1934	+2,914	−319	+2,595	+3,952	−7,109	−3,157	+6,866	−7,428	−562
Percent of change:									
January 1933–January 1934	+8.9	+203.5	+16.8	−.3	+66.8	+3.4	+.8	+79.1	+5.0
December 1933–January 1934	+4.4	−3.7	+3.4	+.9	−13.5	−.6	+1.3	−12.1	−.1
Labor turnover:									
Additions	2,962	1,904	4,866	7,171	20,621	27,792	10,133	22,525	32,658
Separations	1,307	928	2,235	4,839	26,146	30,985	6,146	27,074	33,220
Turnover rate per 100	1.91	11.05	2.91	1.04	42.04	5.40	1.15	39.21	5.52

[1] Including appointments of indefinite duration.
[2] Not including field employees of the Post Office Department.

In January 1934 there were 78,045 employees in the executive departments of the Federal Government in the city of Washington. This is an increase of more than 11,000 as compared with January, 1933, and an increase of over 2,500 as compared with December 1933. The number of permanent employees in the District of Columbia in January 1934 showed an increase of 8.9 percent as compared with January 1933, and an increase of 4.4 percent as compared with December 1933. Comparing the number of temporary employees, January 1934 showed an increase of over 200 percent as compared with January 1933, but a decrease of 3.7 percent as compared with December 1933.

The turn-over rate for the entire executive service within the District of Columbia was 2.91.

Comparing January 1934 with December 1933, there was an increase of 0.9 percent in the number of permanent employees and a decrease of 13.5 percent in the number of temporary employees, making a net decrease of 0.6 percent in employment in the executive Federal departments outside of the District of Columbia.

Table 2 shows the number of employees and amounts of pay rolls of the various branches of the United States Government during December 1933 and January 1934.

TABLE 2.—NUMBER OF EMPLOYEES AND AMOUNTS OF PAY ROLLS IN THE VARIOUS BRANCHES OF THE UNITED STATES GOVERNMENT, DECEMBER 1933 AND JANUARY 1934

Branch of service	Number of employees		Amount of pay roll	
	December 1933	January 1934	December 1933	January 1934
Executive service	591,675	591,113	[1] $80,468,742	[1] $76,007,404
Military service	263,622	262,942	17,656,909	18,499,516
Judicial service	1,872	1,780	432,435	417,000
Legislative service	3,864	3,845	886,781	871,753
Total	861,033	859,680	99,444,867	95,795,673

[1] Revised.

Employment on Class I Steam Railroads in the United States

REPORTS of the Interstate Commerce Commission for class I railroads show that the number of employees (exclusive of executives and officials) decreased from 954,248 on December 15, 1933, to 953,589 (preliminary) on January 15, 1934, or 0.1 percent. Data are not yet available concerning total compensation of employees for January 1934. The latest pay-roll information available shows a decrease from $114,470,607 in November to $112,532,640 in December, or 1.7 percent.

The monthly trend of employment from January 1923 to January 1934 on class I railroads—that is, all roads having operating revenues of $1,000,000 or over—is shown by index numbers published in the following table. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the 12-month average for 1926 as 100.

TABLE 1.—INDEXES OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY 1923 TO JANUARY 1934

[12-month average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
January	98.3	96.6	95.6	95.8	95.5	89.4	88.2	86.3	73.3	61.2	53.0	54.1
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7	60.3	52.7	.....
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9	60.5	51.5	.....
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0	73.5	60.0	51.8	.....
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9	59.7	52.5	.....
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8	57.8	53.6	.....
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4	56.4	55.4	.....
August	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	71.2	55.0	56.8	.....
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3	55.8	57.7	.....
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7	57.0	57.5	.....
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5	55.9	55.9	.....
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	62.6	54.8	[1] 54.1	.....
Average	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	70.6	57.9	54.4	.....

[1] Revised.

Table 2 shows the total number of employees by occupations on the 15th day of November and December 1933 and by group totals on the 15th of January 1934; also total pay roll for the entire months of November and December. Total compensation for the month of January is not yet available. Beginning in January 1933 the Interstate Commerce Commission excluded reports of switching and terminal companies from its monthly tabulations. The actual figures for the months shown in the following table therefore are not comparable with the totals published for the months prior to January 1933. The index numbers of employment for class I railroads shown in table 1 have been adjusted to allow for this revision and furnish a monthly indicator of the trend of employment for January 1923 to the latest month available. In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT ON CLASS I STEAM RAILROADS NOVEMBER AND DECEMBER 1933 AND JANUARY 1934, AND EARNINGS, NOVEMBER AND DECEMBER 1933

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups. Employment figures for January 1934 are available by group totals only at this time.]

Occupation	Number of employees at middle of month			Total earnings	
	November 1933	December 1933	January 1934	November 1933	December 1933
Professional, clerical and general	163,824	163,458	163,565	$21,845,527	$21,901,676
Clerks	85,929	85,560		10,819,823	10,846,995
Stenographers and typists	15,391	15,414		1,841,677	1,843,871
Maintenance of way and structures	198,455	183,493	182,913	14,938,961	14,120,526
Laborers, extra gang and work train	16,598	12,433		880,094	687,749
Laborers, truck and roadway section	105,745	97,999		5,488,164	5,100,124
Maintenance of equipment and stores	275,664	267,879	269,365	29,149,838	28,014,526
Carmen	56,056	54,609		6,686,306	6,363,308
Electrical workers	8,180	8,098		1,066,875	1,052,639
Machinists	38,673	37,862		4,847,188	4,645,553
Skilled trades helpers	61,314	58,972		5,356,784	5,066,012
Laborers (shop, engine houses, power plants, and stores)	21,224	21,065		1,569,571	1,593,643
Common laborers (shop, engine houses, power plants, and stores)	18,615	17,902		1,060,262	998,125
Transportation, other than train, engine, and yard	123,644	123,221	122,845	13,428,694	13,617,666
Station agents	24,134	24,042		3,320,968	3,329,343
Telegraphers, telephoners, and towermen	14,868	14,753		2,009,525	2,058,986
Truckers (stations, warehouses, and platforms)	17,362	17,180		1,257,202	1,221,210
Crossings and bridge flagmen and gatemen	17,095	16,921		1,123,319	1,119,693
Transportation (yardmaster, switch tenders, and hostlers)	12,247	12,112	12,175	2,027,037	2,046,639
Transportation, train and engine	211,600	204,085	202,726	33,080,550	32,831,607
Road conductors	22,969	22,313		4,679,536	4,666,491
Road brakemen and flagmen	48,751	46,780		6,380,106	6,264,302
Yard brakemen and yard helpers	36,713	35,256		4,436,272	4,360,727
Road engineers and motormen	28,168	27,440		6,259,587	6,260,209
Road firemen and helpers	31,178	30,119		4,520,951	4,524,412
All employees	985,434	954,248	953,589	114,470,607	112,532,640

Employment Created by the Public-Works Fund, January 1934

THERE were 273,583 employees working on projects financed from the public-works fund during the month of January 1934. Monthly pay rolls for these employees totaled over $14,000,000.

Employment on Construction Projects, by Types of Project

ALLOTMENTS for construction projects awarded by the Public Works Administration are divided into two groups—Federal allotments and non-Federal allotments.

Projects to be built from Federal allotments are financed wholly by public-works funds. They are built either by force account (that is, the Federal department which has charge of the work hires the laborers directly) or under contracts awarded to commercial firms by the Federal departments, and are supervised entirely by a representative of the Federal Government. These projects include such types of construction as post-office buildings; Federal courthouses; naval vessels; river, harbor, and flood-control projects; reclamation projects; road building; and forestry service.

Table 1 shows, by type of project, employment, pay rolls, and man-hours worked during January 1934 on Federal projects financed by public-works funds.

TABLE 1.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON FEDERAL PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING JANUARY 1934, BY TYPE OF PROJECT

Type of project	Number of wage earners	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Value of materials purchased
Building construction	14,240	$721,391	1,085,450	$0.665	$1,974,861
Public roads	145,701	7,940,127	16,682,611	.476	6,265,000
River, harbor, and flood control	49,886	1,961,683	3,399,592	.577	3,008,967
Streets and roads [1]	10,725	422,276	981,684	.430	426,837
Naval vessels	5,651	585,024	784,613	.746	1,348,656
Reclamation	6,199	483,729	731,349	.661	2,439,384
Forestry	15,793	1,149,102	1,810,518	.635	537,211
Water and sewerage	717	31,142	54,232	.574	44,940
Miscellaneous	7,563	558,158	1,011,522	.552	3,601,216
Total	256,475	13,852,632	26,541,571	.522	19,647,072

[1] Other than those reported by the Bureau of Public Roads.

For the month ending January 15, 1934, there were 256,475 employees (exclusive of the administrative and clerical force) directly engaged in working on Federal construction projects financed by the public-works fund. The Bureau of Public Roads provided work for more than one half of the employees engaged on public-works projects during the month. Nearly 50,000 men were working on river, harbor, and flood-control projects. Forestry service accounted

for more than 15,000; building construction more than 14,000; and streets and roads (other than public roads) more than 10,000. No other type of project engaged as many as 10,000 people.

Pay rolls for all workers on Federal projects totaled nearly $14,000,000 of which more than half was paid to workers on road building under the jurisdiction of the Department of Agriculture. Workers on river, harbor, and flood-control projects were paid nearly $2,000,000 and those in the forestry service over $1,000,000.

Workers on Federal public-works projects earned an average of more than 50 cents per hour. Workers on naval vessels averaged slightly over 74 cents per hour; and those on building construction, reclamation projects, and forestry service averaged in excess of 63 cents per hour; while public-road building was the only type of work on which earnings averaged less than 50 cents per hour.

The value of material orders placed during the month of January totaled over $19,000,000. Contractors working on public-roads projects purchased materials to cost over $6,000,000. Purchase orders for materials used on miscellaneous projects totaled over $3,600,000; on river, harbor, and flood-control projects, over $3,000,000; and on reclamation projects, in excess of $2,000,000.

Non-Federal projects are for the most part confined to building construction (such as school buildings, city and county buildings, housing projects, etc.), street and road paving, and water and sewerage projects. The Public Works Administration makes a direct grant of 30 percent of the total cost of non-Federal work and in many cases will loan the remaining 70 percent.

Table 2 shows employment, pay rolls, and man-hours worked during January 1934 on non-Federal projects financed from public-works funds, by type of project.

TABLE 2.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON NONFEDERAL PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING JANUARY 1934, BY TYPE OF PROJECT

Type of project	Number of wage earners	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Value of materials purchased
Building construction	5,106	$244,277	291,212	$0.839	$2,527,914
Streets and roads	6,225	228,441	406,970	.561	662,338
Water and sewerage	5,284	230,988	389,372	.593	622,295
Miscellaneous	493	18,622	29,466	.632	63,310
Total	17,108	722,328	1,117,020	.647	3,875,857

The 17,108 workers employed on non-Federal public-works projects drew a total pay roll for the month ending January 15 of more than $700,000 and worked over 1,000,000 hours during the month. Their average earnings per hour were slightly over 64 cents.

Street and road paving accounted for the largest number of non-Federal workers. Workers on building construction, however, had

the highest average earnings per hour—their earnings during January averaging nearly 85 cents. Workers on miscellaneous projects had an average pay of 63 cents per hour, while the average pay of street and road workers and water and sewerage workers exceeded 55 cents per hour.

Material orders placed for use on non-Federal projects for the month ending January 15, totaled over $3,800,000.

Employment on Construction Projects, by Geographic Divisions

TABLE 3 shows employment, pay rolls, and man-hours worked during January 1934 on Federal projects financed from Public Works funds, by geographic divisions.

TABLE 3.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON FEDERAL PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	Number of wage earners	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Value of materials purchased
New England	8,536	$661,180	1,111,608	$0.595	$1,000,573
Middle Atlantic	24,058	1,369,363	2,577,805	.531	2,169,086
East North Central	22,327	1,222,448	2,161,477	.566	688,855
West North Central	40,183	2,169,249	4,329,731	.501	949,533
South Atlantic	30,971	1,612,074	3,461,172	.466	1,905,177
East South Central	30,045	1,106,545	2,446,174	.452	1,606,667
West South Central	49,656	2,118,379	4,779,826	.443	1,255,038
Mountain	28,644	2,118,416	3,436,044	.617	1,886,796
Pacific	17,332	1,221,161	1,707,619	.715	845,961
Total continental United States [1]	252,421	13,658,096	26,139,712	.523	[2] 18,785,106
Outside continental United States	4,054	194,536	401,859	.484	845,966
Grand total	256,475	13,852,632	26,541,571	.522	19,647,072

[1] Includes data for 669 wage earners which cannot be charged to any specific geographic division.
[2] Included $6,265,000, estimated value of material orders placed for public-roads projects which cannot be charged to any specific geographic division.

Nearly 257,000 wage earners were working on Federal public-works projects during the month of January. Of these almost 50,000 were employed in the West South Central States, while more than 30,000 were working in each of the following divisions: West North Central, South Atlantic, and East South Central.

Pay rolls in the Mountain, West South Central, and the West North Central divisions totaled over $2,000,000.

The highest average earnings per hour, 72 cents, occurred in the Pacific division. Workers in the Mountain division averaged over 60 cents per hour. In only three divisions—the South Atlantic, East South Central, and the West South Central—were average earnings less than 50 cents per hour.

Material orders, placed by contractors and Government departments doing force-account work, reached a total of over $2,000,000 in the Middle Atlantic States, while in the South Atlantic and the Mountain States they totaled slightly less than $2,000,000.

Table 4 shows employment, pay rolls, and man-hours worked during January on non-Federal projects financed from public-works funds, by geographic divisions.

TABLE 4.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED ON NON-FEDERAL PROJECTS FINANCED FROM PUBLIC-WORKS FUNDS DURING JANUARY 1934, BY GEOGRAPHIC DIVISIONS

Geographic division	Number of wage earners	Amount of pay roll	Number of man-hours worked	Average earnings per hour	Value of materials purchased
New England	1,249	$56,930	93,497	$0.609	$131,265
Middle Atlantic	2,034	61,440	116,921	.525	2,145,911
East North Central	5,720	276,937	435,862	.635	749,722
West North Central	3,051	92,663	141,247	.656	369,063
South Atlantic	852	30,191	49,830	.606	155,513
East South Central	498	19,356	34,164	.567	36,450
West South Central	871	30,882	49,109	.629	68,820
Mountain	987	37,011	60,758	.609	51,641
Pacific	1,788	114,042	131,374	.868	158,525
Total continental United States	17,050	719,452	1,112,762	.647	3,866,910
Outside continental United States	58	2,876	4,258	.675	8,947
Grand total	17,108	722,328	1,117,020	.647	3,875,857

The East North Central division had the largest number of workers on non-Federal projects, followed in order by the West North Central and the Middle Atlantic divisions.

The average hourly earnings for all geographic divisions was 65 cents. In the Pacific States, however, average earnings per hour were over 86 cents. The other divisions, except the Middle Atlantic and the East South Central States, had an average rate of over 60 cents per hour.

The Middle Atlantic was the only division in which contractors placed material orders during the month for more than $1,000,000.

Table 5 shows expenditures for materials purchased during the month ending January 15, 1934, by types of materials.

TABLE 5.—MATERIALS PURCHASED DURING MONTH ENDING JANUARY 15, 1934, FOR PUBLIC-WORKS PROJECTS, BY TYPE OF MATERIAL

Type of material	Amount expended
Aircraft (new)	$567,151
Airplane parts	239,911
Auto trucks	61,087
Bolts, nuts, washers, etc.	24,653
Cast-iron pipe and fittings	397,312
Cement	370,668
Clay products	260,434
Coal	72,214
Concrete products	517,354
Copper products	22,384
Cordage and twine	12,223
Crushed stone	56,675
Doors, shutters, and window sash and frames, molding and trim, metal	75,391
Electrical machinery and supplies	2,210,056
Engines and turbines	250,446
Explosives	179,524
Forgings, iron and steel, not made in plants operated in connection with steel works or rolling mills	383,212
Foundry and machine-shop products, not elsewhere classified	1,728,032
Fuel oil	119,635

TABLE 5.—MATERIALS PURCHASED DURING MONTH ENDING JANUARY 15, 1934, FOR PUBLIC-WORKS PROJECTS, BY TYPE OF MATERIAL—Continued

Type of material	Amount expended
Gasoline	$184,620
Glass	72,068
Hardware, miscellaneous	98,017
Instruments, professional and scientific	241,062
Lighting equipment	57,641
Lubricating oils and greases	33,731
Lumber and timber products	1,192,632
Machine tools	327,965
Marble, granite, slate, and other stone products	513,900
Nonferrous-metal alloys; nonferrous-metal products, except aluminum, not elsewhere classified	22,707
Paints and varnishes	34,263
Paving materials and mixtures	133,857
Planing-mill products	414,933
Plumbing supplies	204,200
Pumps and pumping equipment	119,996
Refrigerators and refrigerator cabinets, including mechanical refrigerators	29,067
Roofing, built-up and roll; asphalt shingles; roof coatings other than paint	74,919
Sand and gravel	283,483
Sheet-metal work	69,612
Steam and hot-water heating apparatus	65,565
Steel-works and rolling-mill products, including structural and ornamental metal work	3,870,799
Tools, other than machine	62,463
Wall plaster, wall board, insulating board, and floor composition	32,814
Wire, drawn from purchased rods	154,154
Wire work, not elsewhere classified	27,933
Other	1,387,466
Public-road projects [1]	6,265,000
Total	23,522,929

[1] Not available by type of material.

During the month ending January 15, 1934, the value of orders placed for material by contractors on public-works projects totaled over $23,000,000. Of this amount, more than $3,500,000 was expended for steel; over $2,000,000 for electrical machinery; over $1,700,000 for foundry and machine-shop products; and over $1,000,000 for lumber.

It is estimated that the fabrication of materials purchased during the month will create approximately 64,000 man-months of labor.

Table 6 gives data concerning employment, pay rolls, and man-hours worked during each of the 4 months for which employment was created by projects financed from public-works funds.

TABLE 6.—EMPLOYMENT, PAY ROLLS, AND MAN-HOURS WORKED DURING OCTOBER, NOVEMBER, AND DECEMBER 1933 AND JANUARY 1934, ON PROJECTS FINANCED FROM PUBLIC WORKS FUNDS

Item	1933			January 1934 [1]
	October	November	December	
Number of wage earners employed	114,098	254,784	270,808	273,583
Amount of pay roll	$7,006,680	$14,458,364	$15,724,700	$14,574,960
Number of man-hours worked	[2] 2,346,927	[2] 9,497,828	[2] 11,241,098	27,658,591
Average earnings per hour	[2] $0.613	[2] $0.589	[2] $0.612	$0.527
Value of materials purchased	[3] $22,005,920	[4] $24,605,055	[5] $24,839,098	$23,522,929

[1] Subject to revision.
[2] Excluding data for Bureau of Public Roads which are not available.
[3] Includes $6,687,273 estimated value of material orders placed for public-road projects.
[4] Includes $12,473,681 estimated value of material orders placed for public-road projects.
[5] Includes $11,424,000 estimated value of material orders placed for public-road projects.

In spite of adverse weather conditions, total employment on public-works projects during January exceeded that reported for December. It must be remembered that by far the greater part of public-works projects entail labor out-of-doors. Weather conditions during January were not conducive to full-time employment on road work, forestry work, reclamation projects, or other out-door activities in the northern section of the country.

Data concerning man-hours worked on public roads are not available for the months of October, November, and December. Since the rates paid on this type of project are somewhat lower than on most of the other types of projects, and since many of the employees are working on public roads, the inclusion of the man-hours in January tended to lower the hourly rate as published. Average hourly earnings for January 1934 were for all types of projects, while those shown for October, November, and December 1933 were confined to projects other than public roads.

Material orders placed during the 4 months totaled $95,000,000, while pay rolls totaled over $51,000,000. These figures must not be construed to show the relationship of the cost of labor to material on public-works projects, as the total pay-roll figures are the amount actually paid to labor on the job, while the value of the materials shown is the total value of material orders placed. Much of this material, however, will not be used, for several months.

Civil Works Administration

DURING the week ending February 1 more than 3,800,000 people drew pay from the $400,000,000 allotted by the Public Works Administration to the Civil Works Administration. This is a decrease of 4 percent as compared with the number on the pay rolls during the week ending January 18.

Table 7 shows the number of civil-works employees on the pay rolls for the weeks ending January 18 and February 1, 1934.

TABLE 7.—NUMBER OF EMPLOYEES AND AMOUNTS OF PAY ROLLS ON CIVIL-WORKS PROJECTS, JAN. 18 AND FEB. 1, 1934

Geographic divisions	Number of employees, week ending—		Amount of pay roll, week ending—	
	Jan. 18	Feb. 1	Jan. 18	Feb. 1
New England	232,258	227,085	$3,762,410	$2,909,822
Middle Atlantic	723,480	728,888	11,394,489	8,957,717
East North Central	865,322	754,954	15,652,585	9,991,040
West North Central	460,446	477,134	7,103,739	4,994,951
South Atlantic	532,852	523,504	6,898,762	4,629,399
East South Central	329,463	335,379	3,709,471	2,690,157
West South Central	512,892	456,230	5,763,530	3,923,259
Mountain	134,681	133,004	2,567,669	1,804,852
Pacific	248,080	239,837	4,493,038	3,221,029
Total	4,039,474	3,876,015	61,345,693	43,122,226
Percent of change		−4.0		−29.7

Although there were 163,000 fewer employees on the pay rolls of the various civil-works projects on February 1 than on January 18, the decrease was not universal, as 3 of the 9 geographic divisions showed more employees on civil-works projects on February 1 than on January 18.

It should be borne in mind, however, that weather conditions affect employment differently in the various sections of the country, and since most of the jobs are outside work, the weather greatly influences employment conditions.

No data are shown for localities outside of continental United States, although it is known that the Civil Works Administration has employed a number of people in our outlying territories.

Emergency Conservation Work

EMPLOYEES on the rolls of the Emergency Conservation Work are now paid by allotments from the Public Works Administration fund. Table 8 shows the employment and pay rolls of the Emergency Conservation Work during the months of December 1933 and January 1934.

TABLE 8.—EMPLOYMENT AND PAY ROLLS IN THE EMERGENCY CONSERVATION WORK, DECEMBER 1933 AND JANUARY 1934

Group	Number of employees		Amount of pay rolls	
	December 1933	January 1934	December 1933	January 1934
Enrolled personnel	288,855	299,101	$9,020,943	$9,340,923
Reserve officers	[1] 4,508	4,585	848,373	896,184
Supervisory and technical	13,168	13,234	1,362,724	1,535,535
Carpenters and laborers	11,343	[1] 10,721	1,215,637	[2] 1,307,000
Total	317,874	[1] 327,641	12,447,677	13,079,642

[1] Revised. [2] Estimated.

There was an increase of nearly 10,000 people engaged in Emergency Conservation Work comparing January 1934 with December 1933. The increase occurred almost entirely in the enrolled personnel.

Information concerning employment and pay rolls in the Emergency Conservation Work is collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, and the Department of the Interior.

The pay of the enrolled personnel is $30 per month, except that 5 percent of the members of each company are paid $45 and an additional 8 percent are paid $36 per month. The pay roll of this branch of the service is figured on this basis.

The carpenters and laborers, shown in table 8, are constructing recreation buildings in a number of camps. This work will probably be completed sometime in March.

Table 9 shows the monthly totals of employees and pay rolls of the Emergency Conservation Work from the inception of the work in May 1933 to January 1934. There has been a slight revision in these figures.

TABLE 9.—MONTHLY TOTALS OF EMPLOYEES AND PAY ROLLS IN THE EMERGENCY CONSERVATION WORK, MAY 1933–JANUARY 1934

Months	Number of employees	Amount of pay rolls	Months	Number of employees	Amount of pay rolls
1933			October	292,456	$11,994,703
May	191,113	$6,353,641	November	340,713	14,086,448
June	281,861	9,663,701	December	317,874	12,447,677
July	314,142	11,223,542	1934		
August	305,039	11,333,318			
September	240,901	9,487,755	January	327,641	[1] 13,079,642

[1] Subject to revision.

Employment on Public Roads (Other than Public Works)

THE following table shows, by geographic divisions, the number of employees, exclusive of those paid from the public-works fund, engaged in building and maintaining State and Federal roads during the months of December 1933 and January 1934.

TABLE 1.—NUMBER OF EMPLOYEES ENGAGED IN THE CONSTRUCTION AND MAINTENANCE OF PUBLIC ROADS, STATE AND FEDERAL, DURING DECEMBER 1933 AND JANUARY 1934, BY GEOGRAPHIC DIVISIONS [1]

Geographic division	Federal				State			
	Number of employees		Amount of pay rolls		Number of employees		Amount of pay rolls	
	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934	December 1933	January 1934
New England	855	200	51,670	11,000	14,213	9,209	1,316,448	625,643
Middle Atlantic	1,619	474	113,030	36,148	32,632	41,728	1,677,643	2,115,187
East North Central	2,886	779	163,161	53,009	34,849	27,352	1,867,178	1,594,500
West North Central	1,854	702	104,243	42,017	29,600	18,848	1,567,817	1,046,900
South Atlantic	3,537	1,641	159,457	61,491	34,481	30,513	1,238,904	1,091,030
East South Central	3,311	1,100	127,665	46,752	13,040	9,110	514,117	359,648
West South Central	4,839	2,260	223,565	92,735	12,034	10,373	741,796	693,409
Mountain	1,525	414	117,174	39,909	8,167	6,285	538,683	415,657
Pacific	919	63	74,761	5,365	8,607	8,367	765,774	742,135
Total	21,345	7,633	1,134,726	388,426	187,623	161,785	10,228,360	8,684,109
Percent of change		−64.2		−65.8		−13.8		−15.1

[1] Excluding employment furnished by projects financed from the public-works fund.

The funds from which the regular Federal highway-building program is financed have been practically exhausted, and for that reason employment on Federal roads not financed from the public-works

fund may be expected to cease altogether in the near future. Practically all new contracts awarded for road building are now financed from the public-works fund.

Due to weather conditions there was a decrease in the number of employees working on State highways, comparing January 1934 with December 1933, of 13.8 percent. Pay rolls for these workers also decreased 15.1 percent. Of the workers engaged on State roads, 84.6 percent were engaged in maintenance work and 15.4 percent in the construction of new roads.

Table 2 shows the number of employees engaged in the construction and maintenance of State and Federal public roads, by months, January to December 1933.

TABLE 2.—NUMBER OF EMPLOYEES ENGAGED IN CONSTRUCTION AND MAINTENANCE OF PUBLIC ROADS, STATE AND FEDERAL, JANUARY TO DECEMBER 1933[1]

Month	Number of employees working on—			
	Federal roads	State roads		
		New	Maintenance	Total
January	74,405	39,906	150,989	190,895
February	76,969	36,352	140,639	176,991
March	94,491	37,891	145,559	183,450
April	121,089	40,560	136,996	177,556
May	138,934	47,540	142,713	190,253
June	151,614	54,388	152,855	207,243
July	128,801	61,428	141,558	202,986
August	106,907	60,365	158,159	218,524
September	79,980	62,366	160,492	222,858
October	56,872	58,711	171,260	229,971
November	38,112	63,379	170,765	234,144
December	21,345	46,810	140,813	187,623

[1] Excluding employment furnished by projects financed from the public-works fund.

The peak of employment on Federal roads, other than those financed from the public-works fund, was reached in June, when 151,614 people were working under the regular Federal highway appropriation. The high point in number of employees working on State roads was reached in November, when 234,144 employees were paid from State highway funds.

RETAIL PRICES

THE Bureau of Labor Statistics of the United States Department of Labor has since 1913 collected, compiled, and issued, as of the 15th of each month, retail prices of food. From time to time the work has been expanded by including additional cities and articles. The Bureau now covers 51 localities well scattered throughout the continental United States and also the Territory of Hawaii. Retail prices are secured for 45 of the principal articles of food.

In order that current information may be available oftener, the Bureau is now collecting these prices every 2 weeks. The plan was inaugurated during August 1933, and prices are being collected every other Tuesday.

Retail prices of coal were collected on January 15 and July 15 for the years 1913 through 1919 from the cities covered in the retail food study. Beginning with June 1920, prices have been collected on the 15th of each month. No change has been made in the dates for the collection of retail prices of coal. A summary of prices and index numbers for earlier years and for current months is shown in the section beginning on page 732.

Retail Prices of Food, January 1934

RETAIL prices of food were collected by the Bureau for three periods during the month, namely, January 2, 16, and 30. Prices were received from the same dealers and the same cities were covered as have been included in the Bureau's reports for former periods. For August 29, however, a representative number of reports was not received from some of the cities, and average prices for the United States as a whole for this date are not strictly comparable with average prices shown for other dates. The index numbers, however, have been adjusted by using the percent of change in identical cities and are, therefore, comparable with indexes of other periods.

Three commodities have been added to the Bureau's list of food items beginning with August 29. These items are rye bread, canned peaches, and canned pears. Only average prices can be shown for these articles as corresponding prices for the year 1913 are not available for the purpose of index numbers.

Data for the tabular statements shown in this report are compiled from simple averages of the actual selling prices as reported to the

Bureau by retail dealers in the 51 cities. Comparable information for months and years, 1913 to 1928, inclusive, is shown in Bulletins Nos. 396 and 495; and by months and years, 1929 to 1932, inclusive, in the March, April, and June 1933 issues of this publication.

Indexes of all articles, combined, or groups of articles combined, both for cities and for the United States, are weighted according to the average family consumption. Consumption figures used since January 1921 are given in Bulletin 495 (p. 13). Those used for prior dates are given in Bulletin 300 (p. 61). The list of articles included in the groups—cereals, meats, and dairy products—will be found in the June 1932 issue of this publication.

Table 1 shows index numbers of the total weighted retail cost of important food articles and of three groups of these articles; viz, cereals, meats, and dairy products, in the United States, 51 cities combined, by years, 1913 to 1933, inclusive, and on specified days of the months of 1933 and 1934. These index numbers are based on the year 1913 as 100.

TABLE 1.—INDEX NUMBERS OF THE TOTAL RETAIL COST OF FOOD AND OF CEREALS, MEATS, AND DAIRY PRODUCTS IN THE UNITED STATES BY YEARS, 1913 TO 1933, INCLUSIVE, AND ON SPECIFIED DATES OF EACH MONTH, JAN. 15, 1933, TO JAN. 30, 1934, INCLUSIVE

[1913=100]

Year	All food	Cereals	Meats	Dairy products
1913	100.0	100.0	100.0	100.0
1914	102.4	106.7	103.4	97.1
1915	101.3	121.6	99.6	96.1
1916	113.7	126.8	108.2	103.2
1917	146.4	186.5	137.0	127.6
1918	168.3	194.3	172.8	153.4
1919	185.9	198.0	184.2	176.6
1920	203.4	232.1	185.7	185.1
1921	153.3	179.8	158.1	149.5
1922	141.6	159.3	150.3	135.9
1923	146.2	156.9	149.0	147.6
1924	145.9	160.4	150.2	142.8
1925	157.4	176.2	163.0	147.1
1926	160.6	175.5	171.3	145.5
1927	155.4	170.7	169.9	148.7
1928	154.3	167.2	179.2	150.0
1929	156.7	164.1	188.4	148.6
1930	147.1	158.0	175.8	136.5
1931	121.3	135.9	147.0	114.6
1932	102.1	121.1	116.0	96.6
1933	99.7	126.6	102.7	94.6
1933				
Jan. 15	94.8	112.3	99.9	93.3
Feb. 15	90.9	112.0	99.0	90.3
Mar. 15	90.5	112.3	100.1	88.3
Apr. 15	90.4	112.8	98.8	88.7
May 15	93.7	115.8	100.1	92.2
June 15	96.7	117.2	103.7	93.5
July 15	104.8	128.0	103.5	97.7
Aug. 15	106.7	137.8	105.7	96.5
Aug. 29	107.1	138.8	106.9	97.5
Sept. 12	107.0	140.2	104.4	97.8
Sept. 26	107.4	142.7	107.8	97.9
Oct. 10	107.3	143.8	107.3	98.6
Oct. 24	106.6	143.3	106.3	98.4
Nov. 7	106.7	143.4	105.9	98.6
Nov. 21	106.8	143.5	104.1	98.5
Dec. 5	105.5	142.5	101.2	98.7
Dec. 19	103.9	142.0	100.4	94.7
1934				
Jan. 2	104.5	142.4	100.8	95.7
Jan. 16	105.2	142.5	102.3	96.0
Jan. 30	105.8	142.8	103.0	95.9

The following chart shows the trend in the retail cost of all food and of the classified groups, cereals, meats, and dairy products in the United States (51 cities) from January 15, 1929, to January 30, 1934, inclusive.

Table 2 shows index numbers of the total weighted retail cost of important food articles and of cereals, meats, and dairy products in the United States based on the year 1913 as 100, and changes on January 30, 1934, compared with January 15, 1933, and January 2 and January 16, 1934.

RETAIL PRICES of FOOD
1913 = 100
U.S. Department of Labor
BUREAU OF LABOR STATISTICS
Washington
Index Numbers
225
200
175
150
125
100
75
0
1929
1930
1931
1932
1933
1934
1935
Meats
Cereals
Dairy Products
All Foods

TABLE 2.—INDEX NUMBERS OF THE TOTAL WEIGHTED RETAIL COST OF FOOD AND OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES ON SPECIFIED DATES, AND PERCENT OF CHANGE, JAN. 30, 1934, COMPARED WITH JAN. 15, 1933, AND JAN. 2 AND JAN. 16, 1934

Article	Index (1913=100)						Percent of change Jan. 30, 1934, compared with—		
	1933	1933		1934					
	Jan. 15	Dec. 5	Dec. 19	Jan. 2	Jan. 16	Jan. 30	Jan. 15, 1933	Jan. 2, 1934	Jan. 16, 1934
All food	94.8	105.5	103.9	104.5	105.2	105.8	+11.6	+1.2	+0.6
Cereals	112.3	142.5	142.0	142.4	142.5	142.8	+27.2	+0.3	+0.2
Meats	99.9	101.2	100.4	100.8	102.3	103.0	+3.1	+2.2	+0.7
Dairy products	93.3	98.7	94.7	95.7	96.0	95.9	+2.8	+0.2	−0.1

TABLE 3.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES ON JAN. 15, DEC. 5, AND DEC. 19, 1933, AND JAN. 2, JAN. 16, AND JAN. 30, 1934

Article	Average price						Index number (1913=100)					
	1933			1934			1933			1934		
	Jan. 15	Dec. 5	Dec. 19	Jan. 2	Jan. 16	Jan. 30	Jan. 15	Dec. 5	Dec. 19	Jan. 2	Jan. 16	Jan. 30
	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.
Sirloin steak, pound	28.9	28.2	27.8	27.5	28.1	28.2	113.8	111.0	109.4	108.3	110.6	111.0
Round steak, do	24.9	24.3	24.2	24.0	24.4	24.5	111.7	109.0	108.5	107.6	109.4	109.9
Rib roast, do	21.2	20.3	19.9	19.7	20.0	20.1	107.1	102.5	100.5	99.5	101.0	101.5
Chuck roast, do	15.3	15.0	14.8	14.7	14.8	14.8	95.6	93.8	92.5	91.9	92.5	92.5
Plate beef, do	10.4	9.8	9.7	9.6	9.9	10.0	86.0	81.0	80.2	79.3	81.8	82.6
Pork chops, do	16.5	19.7	19.8	19.9	20.0	19.9	78.6	93.8	94.3	94.8	95.2	94.8
Bacon, sliced, do	21.4	23.1	23.1	23.5	23.4	23.7	79.3	85.6	85.6	87.0	86.7	87.8
Ham, sliced, do	28.9	31.7	31.3	31.4	31.4	31.6	107.4	117.8	116.4	116.7	116.7	117.5
Lamb, leg of, do	21.7	21.0	20.7	20.8	21.5	22.7	114.8	111.1	109.5	110.1	113.8	120.1
Hens, do	21.4	19.8	19.9	21.5	22.4	22.8	100.5	93.0	93.4	100.9	105.2	107.0
Salmon, red, canned 16-oz. can	19.4	20.8	20.8	20.9	20.9	21.2						
Milk, fresh, quart	10.4	11.2	11.2	11.2	11.1	11.0	116.9	125.8	125.8	125.8	124.7	123.6
Milk, evaporated 14½-oz. can	6.6	6.8	6.8	6.8	6.8	6.8						
Butter, pound	27.1	28.0	24.1	25.2	25.5	26.3	70.8	73.1	62.9	65.8	66.6	68.7
Margarine, do	13.4	12.6	12.5	12.4	12.5	12.7						
Cheese, do	22.3	22.9	22.3	22.1	22.0	22.5	100.9	103.6	100.9	100.0	99.5	101.8
Lard, do	8.1	9.6	9.4	9.3	9.4	9.4	51.3	60.8	59.5	58.9	59.5	59.5
Vegetable lard substitute pound	18.7	19.0	19.0	19.1	19.2	19.1						
Eggs, strictly fresh, dozen	32.4	35.1	32.1	30.8	29.9	29.6	93.9	101.7	93.0	89.3	86.7	85.8
Bread, white, wheat pound	6.4	7.9	7.9	7.9	7.9	7.9	114.3	141.1	141.1	141.1	141.1	141.1
Flour, do	2.9	4.8	4.7	4.7	4.7	4.7	87.9	145.5	142.4	142.4	142.4	142.4
Cornmeal, do	3.5	4.0	4.0	4.2	4.2	4.4	116.7	133.3	133.3	140.0	140.0	146.7
Rolled oats, do	5.7	6.6	6.6	6.6	6.5	6.6						
Corn flakes, 8-oz package	8.5	8.9	8.9	9.0	9.0	9.0						
Wheat cereal, 28-oz package	22.4	24.0	24.1	24.1	24.2	24.2						
Macaroni, pound	14.7	15.8	15.8	15.7	15.6	15.5						
Rice, do	5.9	7.0	7.0	7.3	7.5	7.6	67.8	80.5	80.5	83.9	86.2	87.4
Beans, navy, do	4.3	5.9	5.9	5.8	5.7	5.8						
Potatoes, do	1.5	2.2	2.3	2.4	2.6	2.7	88.2	129.4	135.3	141.2	152.9	158.8
Onions, do	2.7	3.5	3.8	4.2	4.5	4.7						
Cabbage, do	2.9	3.9	4.3	4.6	4.7	4.5						
Pork and beans, 16-oz. can	6.6	6.9	6.8	6.5	6.7	6.8						
Corn, canned, no. 2 can	10.0	11.0	10.9	11.0	11.0	11.1						
Peas, canned, do	12.6	13.6	13.6	14.2	15.0	16.1						
Tomatoes, canned, do	8.6	9.8	9.9	9.9	9.9	10.4						
Sugar, granulated, pound	5.1	5.6	5.5	5.5	5.4	5.4	92.7	101.8	100.0	100.0	98.2	98.2
Tea, do	67.2	66.9	67.6	67.9	68.3	68.3	123.5	123.0	124.3	124.8	125.6	125.6
Coffee, do	28.7	26.5	26.4	26.4	26.3	26.4	96.3	88.9	88.6	88.6	88.3	88.6
Prunes, do	8.9	10.7	10.7	10.8	10.8	11.0						
Raisins, do	9.5	9.3	9.1	9.3	9.3	9.3						
Bananas, dozen	23.0	24.5	24.8	25.1	24.1	23.2						
Oranges, do	27.1	26.6	25.8	27.0	27.8	27.8						
Peaches, no. 2½ can		17.4	17.4	17.5	17.6	17.7						
Pears, do		20.5	20.4	20.6	20.7	20.6						
Bread, rye, pound		8.6	8.6	8.6	8.6	8.5						

Table 3 shows the average retail prices of principal food articles for the United States, and index numbers for 23 of these articles based on the year 1913, for January 15, 1933, December 5 and December 19, 1933, and January 2, January 16, and January 30, 1934.

Table 4 shows index numbers of the weighted retail cost of food for the United States and 39 cities, based on the year 1913 as 100. The percent of change on January 30, 1934, compared with January 15, 1933, and January 2 and January 16, 1934, are also given for these cities and the United States and for 12 additional cities from which prices were not secured in 1913.

TABLE 4.—INDEX NUMBERS OF THE TOTAL WEIGHTED RETAIL COST OF FOOD BY CITIES AND FOR THE UNITED STATES ON SPECIFIED DATES, AND PERCENT OF CHANGE JAN. 30, 1934, COMPARED WITH JAN. 15, 1933, AND JAN. 2 AND JAN. 16, 1934

City	Index (1913=100)						Percent of change Jan. 30, 1934, compared with—		
	1933			1934			1933	1934	
	Jan. 15	Dec. 5	Dec. 19	Jan. 2	Jan. 16	Jan. 30	Jan. 15	Jan. 2	Jan. 16
United States	94.8	105.5	103.9	104.5	105.2	105.8	+11.5	+1.2	+0.6
Atlanta	92.0	101.3	102.4	100.0	100.5	101.8	+10.7	+1.8	+1.3
Baltimore	99.3	111.6	109.5	110.8	110.8	110.6	+11.4	−.1	−.2
Birmingham	92.7	103.3	102.3	102.7	105.0	105.7	+14.0	+2.9	+.7
Boston	98.1	106.2	103.6	105.5	105.4	106.1	+8.1	+.5	+.6
Bridgeport							+8.0	−.7	−1.1
Buffalo	97.9	110.0	108.4	109.3	109.7	110.1	+12.4	+.8	+.4
Butte							+3.1	+2.0	+1.9
Charleston, S.C	97.3	107.8	109.3	108.8	108.8	107.1	+10.0	−1.6	−1.6
Chicago	97.7	109.4	108.0	108.3	110.0	109.6	+12.2	+1.0	−.4
Cincinnati	95.1	105.0	101.3	104.3	105.2	106.0	+11.5	+1.7	+.8
Cleveland	88.1	101.9	100.7	100.6	102.8	101.4	+15.2	+.9	−1.3
Columbus							+18.5	+3.3	+1.6
Dallas	90.4	105.6	103.2	101.6	102.2	102.3	+13.2	+.6	+.1
Denver	92.9	98.9	97.0	97.3	97.4	100.5	+8.1	+3.3	+3.1
Detroit	89.6	104.5	103.1	105.6	105.2	104.8	+17.0	−.7	−.3
Fall River	94.0	104.5	103.1	103.3	103.9	105.0	+11.6	+1.6	+1.0
Houston							+19.4	+4.5	+2.5
Indianapolis	87.8	99.6	98.0	98.6	99.7	99.2	+13.0	+.7	−.5
Jacksonville	86.0	99.4	97.8	98.1	97.8	97.6	+13.5	−.6	−.3
Kansas City	93.9	102.3	100.3	101.0	103.2	104.0	+10.8	+2.9	+.8
Little Rock	81.3	95.5	98.0	95.7	99.0	97.4	+19.9	+1.8	−1.6
Los Angeles	91.8	98.1	94.9	95.4	93.8	92.8	+1.1	−2.6	−1.1
Louisville	88.5	100.1	99.5	100.2	100.2	102.2	+15.5	+2.0	+2.0
Manchester	96.1	106.7	105.1	106.3	105.8	107.1	+11.5	+.8	+1.2
Memphis	86.1	98.7	98.7	98.0	99.2	100.2	+16.4	+2.3	+1.0
Milwaukee	95.4	106.1	103.9	105.6	107.3	108.3	+13.5	+2.5	+.9
Minneapolis	92.0	106.6	104.7	106.3	107.5	107.8	+17.2	+1.4	+.3
Mobile							+10.4	+1.8	(1)
Newark	98.5	106.7	105.4	106.2	106.1	106.9	+8.5	+.6	+.8
New Haven	101.5	110.1	110.2	111.5	112.2	110.5	+8.9	−.8	−1.5
New Orleans	96.2	105.0	104.3	104.9	103.6	105.4	+9.5	+.5	+1.7
New York	102.6	113.7	110.6	112.5	112.3	113.5	+10.7	+.9	+1.1
Norfolk							+7.7	+.2	+.1
Omaha	85.4	99.8	98.8	98.8	101.1	102.2	+19.7	+3.5	+1.1
Peoria							+13.4	+1.3	−.9
Philadelphia	96.8	110.7	108.2	110.5	110.6	114.4	+18.2	+3.6	+3.5
Pittsburgh	90.7	104.7	102.1	103.1	105.2	109.6	+20.9	+6.3	+4.2
Portland, Maine							+8.4	+.2	+.2
Portland, Oreg	90.2	94.1	92.8	93.8	93.6	93.7	+4.0	−.1	+.2
Providence	98.7	107.8	105.8	106.8	106.3	107.1	+8.5	+.3	+.7
Richmond	98.3	110.0	109.0	108.1	109.0	108.4	+10.4	+.3	−.5
Rochester							+14.1	+1.5	+.8
St. Louis	94.1	107.4	104.7	105.8	107.3	108.4	+15.3	+2.5	+1.0
St. Paul							+16.6	+2.3	+1.5
Salt Lake City	82.2	91.5	89.1	90.6	89.3	90.3	+9.8	−.3	+1.1
San Francisco	102.2	109.4	106.3	108.4	104.4	107.9	+5.5	−.5	+3.4
Savannah							+11.5	+1.1	+1.1
Scranton	102.0	113.9	112.0	111.5	112.9	112.2	+9.9	+.6	−.6
Seattle	94.1	101.9	100.0	100.9	101.6	103.3	+9.7	+2.3	+1.6
Springfield, Ill							+12.3	+1.2	+.3
Washington	101.4	112.4	110.3	110.0	110.6	110.9	+9.4	+.9	+.3
Hawaii:									
Honolulu							+4.5	(1)	
Other localities							+5.2	+2.3	

[1] No change.

Retail Prices of Coal, January 15, 1934

RETAIL prices of coal as of the 15th of each month are secured from each of the 51 cities from which retail food prices are obtained. The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or bins where an extra handling is necessary.

Average prices for the United States for bituminous coal and for stove and chestnut sizes of Pennsylvania anthracite are computed from the quotations received from retail dealers in all cities where these coals are sold for household use. The prices shown for bituminous coal are averages of prices of the several kinds. In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

Table 1 shows for the United States both average prices and index numbers of Pennsylvania white-ash anthracite, stove and chestnut sizes, and of bituminous coal on January 15 and July 15, 1913 to 1932, and for each month from January 15, 1933, to January 15, 1934. An average price for the year 1913 has been made from the averages for January and July of that year. The average price for each month has been divided by this average price for the year 1913 to obtain the index number.

TABLE 1.—AVERAGE RETAIL PRICES PER 2,000 POUNDS AND INDEX NUMBERS OF COAL FOR THE UNITED STATES BASED ON THE YEAR 1913 AS 100, ON THE 15TH OF SPECIFIED MONTHS FROM JAN. 1913 TO JAN. 1934

Year and month	Pennsylvania anthracite, white ash—				Bituminous		Year and month	Pennsylvania anthracite, white ash—				Bituminous	
	Stove		Chestnut					Stove		Chestnut			
	Average price 2,000 lb.	Index (1913 = 100)	Average price 2,000 lb.	Index (1913 = 100)	Average price 2,000 lb.	Index (1913 = 100)		Average price 2,000 lb.	Index (1913 = 100)	Average price 2,000 lb.	Index (1913 = 100)	Average price 2,000 lb.	Index (1913 = 100)
	Dol.		*Dol.*		*Dol.*			*Dol.*		*Dol.*		*Dol.*	
1913: Yr. av.	7.73	100.0	7.91	100.0	5.43	100.0	1926: Jan.	(1)	(1)	(1)	(1)	9.74	179.3
Jan.	7.99	103.4	8.15	103.0	5.48	100.8	July	15.43	199.7	15.19	191.9	8.79	160.1
July	7.46	96.6	7.68	97.0	5.39	99.2	1927: Jan.	15.66	202.7	15.42	194.8	9.96	183.3
1914: Jan.	7.80	100.9	8.00	101.0	5.97	109.9	July	15.15	196.1	14.81	187.1	8.91	163.9
July	7.60	98.3	7.78	98.3	5.46	100.6	1928: Jan.	15.44	199.8	15.08	190.6	9.30	171.1
1915: Jan.	7.83	101.3	7.99	101.0	5.71	105.2	July	14.91	192.9	14.63	184.9	8.69	159.9
July	7.54	97.6	7.73	97.7	5.44	100.1	1929: Jan.	15.38	199.1	15.06	190.3	9.09	167.2
1916: Jan.	7.93	102.7	8.13	102.7	5.69	104.8	July	14.94	193.4	14.63	184.8	8.62	158.6
July	8.12	105.2	8.28	104.6	5.52	101.6	1930: Jan.	15.33	198.4	15.00	189.5	9.11	167.6
1917: Jan.	9.29	120.2	9.40	118.8	6.96	128.1	July	14.84	192.1	14.53	183.6	8.65	159.1
July	9.08	117.5	9.16	115.7	7.21	132.7	1931: Jan.	15.12	195.8	14.88	188.1	8.87	163.2
1918: Jan.	9.88	127.9	10.03	126.7	7.68	141.3	July	14.61	189.1	14.59	184.3	8.09	148.9
July	9.96	128.9	10.07	127.3	7.92	145.8	1932: Jan.	15.00	194.2	14.97	189.1	8.17	150.3
1919: Jan.	11.51	149.0	11.61	146.7	7.90	145.3	July	13.37	173.0	13.16	166.2	7.50	138.0
July	12.14	157.2	12.17	153.8	8.10	149.1	1933: Jan.	13.82	178.9	13.61	171.9	7.46	137.3
1920: Jan.	12.59	162.9	12.77	161.3	8.81	162.1	Feb.	13.75	178.0	13.53	171.0	7.45	137.0
July	14.28	184.9	14.33	181.1	10.55	194.1	Mar.	13.70	177.3	13.48	170.4	7.43	136.7
1921: Jan.	15.99	207.0	16.13	203.8	11.82	217.6	Apr.	13.22	171.1	13.00	164.3	7.37	135.6
July	14.90	192.8	14.95	188.9	10.47	192.7	May	12.44	161.0	12.25	154.8	7.17	132.0
1922: Jan.	14.98	193.9	15.02	189.8	9.89	182.0	June	12.18	157.6	12.00	151.6	7.18	132.1
July	14.87	192.4	14.92	188.5	9.49	174.6	July	12.47	161.3	12.26	155.0	7.64	140.7
1923: Jan.	15.43	199.7	15.46	195.3	11.18	205.7	Aug.	12.85	166.3	12.65	159.8	7.77	143.0
July	15.10	195.5	15.05	190.1	10.04	184.7	Sept.	13.33	172.5	13.12	165.8	7.94	146.0
1924: Jan.	15.77	204.1	15.76	199.1	9.75	179.5	Oct.	13.44	174.0	13.23	167.1	8.08	148.7
July	15.24	197.2	15.10	190.7	8.94	164.5	Nov.	13.46	174.3	13.26	167.5	8.18	150.6
1925: Jan.	15.45	200.0	15.37	194.2	9.24	170.0	Dec.	13.45	174.0	13.24	167.2	8.18	150.6
July	15.14	196.0	14.93	188.6	8.61	158.5	1934: Jan.	13.44	174.0	13.25	167.4	8.24	151.6

[1] Insufficient data.

Table 2 shows average retail prices per ton of 2,000 pounds and index numbers (1913 = 100) for the United States on January 15, 1933, December 15, 1933, and January 15, 1934, and percentage change in the year and in the month.

TABLE 2.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF COAL FOR THE UNITED STATES, AND PERCENT OF CHANGE ON JAN. 15, 1934, COMPARED WITH JAN. 15 AND DEC. 15, 1933

Article	Average retail price and index number			Percent of change Jan. 15, 1934, compared with—	
	Jan. 15, 1933	Dec. 15, 1933	Jan. 15, 1934	Jan. 15, 1933	Dec. 15, 1933
Pennsylvania anthracite:					
Stove:					
Average price per 2,000 pounds	$13.82	$13.45	$13.44	−2.7	−0.1
Index (1913=100)	178.9	174.0	174.0		
Chestnut:					
Average price per 2,000 pounds	$13.61	$13.24	$12.25	−2.6	+.1
Index (1913=100)	171.9	167.2	167.4		
Bituminous:					
Average price per 2,000 pounds	$7.46	$8.18	$8.24	+10.6	+.7
Index (1913=100)	137.3	150.6	151.6		

Table 3 shows average retail prices of coal for household use by cities on January 15 and December 15, 1933, and January 15, 1934, as reported by local dealers in each city.

TABLE 3.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, JAN. 15 AND DEC. 15, 1933, AND JAN. 15, 1934, BY CITIES

City and kind of coal	1933		1934
	Jan. 15	Dec. 15	Jan. 15
Atlanta, Ga.:			
Bituminous, prepared sizes	$6.12	$6.98	$7.02
Baltimore, Md.:			
Pennsylvania anthracite:			
Stove	13.25	13.25	13.25
Chestnut	12.75	13.00	13.00
Bituminous:			
Prepared sizes:			
Low volatile	8.75	9.38	9.88
Run of mine:			
High volatile	6.86	7.61	7.64
Birmingham, Ala.:			
Bituminous, prepared sizes	5.07	6.01	6.07
Boston, Mass.:			
Pennsylvania anthracite:			
Stove	13.75	13.75	13.75
Chestnut	13.50	13.50	13.50
Bridgeport, Conn.:			
Pennsylvania anthracite:			
Stove	12.75	13.75	13.75
Chestnut	12.75	13.75	13.75
Buffalo, N.Y.:			
Pennsylvania anthracite:			
Stove	12.42	12.85	12.85
Chestnut	12.21	12.60	12.64
Butte, Mont.:			
Bituminous, prepared sizes	9.72	9.85	9.75
Charleston, S.C.:			
Bituminous, prepared sizes	8.67	9.79	9.75
Chicago, Ill.:			
Pennsylvania anthracite:			
Stove	15.75	13.99	13.99
Chestnut	15.50	13.79	13.79
Chicago, Ill.—Continued.			
Bituminous:			
Prepared sizes:			
High volatile	$7.25	$8.21	$8.21
Low volatile	9.98	10.83	10.83
Run of mine:			
Low volatile	7.19	7.76	7.76
Cincinnati, Ohio:			
Bituminous:			
Prepared sizes:			
High volatile	5.25	6.15	6.10
Low volatile	7.50	7.92	8.00
Cleveland, Ohio:			
Pennsylvania anthracite:			
Stove	13.69	12.38	12.38
Chestnut	13.44	12.13	12.13
Bituminous:			
Prepared sizes:			
High volatile	5.52	6.20	6.20
Low volatile	8.18	9.00	9.00
Columbus, Ohio:			
Bituminous:			
Prepared sizes:			
High volatile	4.92	6.10	6.11
Low volatile	6.50	7.50	7.54
Dallas, Tex.:			
Arkansas anthracite, egg	14.00	14.00	14.00
Bituminous, prepared sizes	10.75	10.50	10.50
Denver, Colo.:			
Colorado anthracite:			
Furnace, 1 and 2 mixed	14.50	15.50	15.58
Stove, 3 and 5 mixed	14.50	15.50	15.58
Bituminous, prepared sizes	7.02	8.10	8.03

TABLE 3.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, JAN. 15 AND DEC. 15, 1933, AND JAN. 15, 1934, BY CITIES—Continued

City and kind of coal	1933		1934
	Jan. 15	Dec. 15	Jan. 15
Detroit, Mich.:			
Pennsylvania anthracite:			
Stove	$13.33	$12.62	$12.71
Chestnut	13.17	12.36	12.45
Bituminous:			
Prepared sizes:			
High volatile	5.80	6.84	6.86
Low volatile	6.96	7.65	7.89
Run of mine:			
Low volatile	6.38	6.70	7.02
Fall River, Mass.:			
Pennsylvania anthracite:			
Stove	14.50	14.50	14.50
Chestnut	14.25	14.25	14.25
Houston, Tex.:			
Bituminous, prepared sizes	10.50	11.60	11.60
Indianapolis, Ind.:			
Bituminous:			
Prepared sizes:			
High volatile	5.05	5.93	5.99
Low volatile	7.42	8.20	8.20
Run of mine:			
Low volatile	6.05	7.00	7.00
Jacksonville, Fla.:			
Bituminous, prepared sizes	9.00	11.13	11.13
Kansas City, Mo.:			
Arkansas anthracite:			
Furnace	10.50	10.50	10.50
Stove no. 4	12.17	12.58	12.58
Bituminous, prepared sizes	5.61	5.79	5.85
Little Rock, Ark.:			
Arkansas anthracite, egg	10.75	10.50	10.50
Bituminous, prepared sizes	8.22	8.33	8.33
Los Angeles, Calif.:			
Bituminous, prepared sizes	16.25	17.30	17.04
Louisville, Ky.:			
Bituminous:			
Prepared sizes:			
High volatile	4.64	5.62	5.46
Low volatile	7.25	8.06	7.83
Manchester, N.H.:			
Pennsylvania anthracite:			
Stove	14.83	15.00	15.00
Chestnut	14.83	15.00	15.00
Memphis, Tenn.:			
Bituminous, prepared sizes	5.68	7.14	7.18
Milwaukee, Wis.:			
Pennsylvania anthracite:			
Stove	15.05	13.25	13.25
Chestnut	14.80	13.00	13.00
Bituminous:			
Prepared sizes:			
High volatile	6.94	7.50	7.51
Low volatile	9.29	9.83	9.83
Minneapolis, Minn.:			
Pennsylvania anthracite:			
Stove	17.35	15.50	15.50
Chestnut	17.10	15.25	15.25
Bituminous:			
Prepared sizes:			
High volatile	9.56	9.91	9.93
Low volatile	11.79	12.24	12.17
Mobile, Ala.:			
Bituminous, prepared sizes	7.32	8.46	8.44
Newark, N.J.:			
Pennsylvania anthracite:			
Stove	12.13	12.75	12.75
Chestnut	11.88	12.50	12.50
New Haven, Conn.:			
Pennsylvania anthracite:			
Stove	13.90	13.90	13.90
Chestnut	13.90	13.90	13.90
New Orleans, La.:			
Bituminous, prepared sizes	8.57	10.07	10.10
New York, N.Y.:			
Pennsylvania anthracite:			
Stove	$11.89	$12.45	$12.60
Chestnut	11.64	12.20	12.35
Norfolk, Va.:			
Pennsylvania anthracite:			
Stove	13.00	14.00	14.00
Chestnut	13.00	14.00	14.00
Bituminous:			
Prepared sizes:			
High volatile	6.50	8.00	8.00
Low volatile	8.00	9.50	9.50
Run of mine:			
Low volatile	6.50	8.00	8.00
Omaha, Nebr.:			
Bituminous, prepared sizes	8.35	8.56	8.59
Peoria, Ill.:			
Bituminous, prepared sizes	6.09	6.43	6.55
Philadelphia, Pa.:			
Pennsylvania anthracite:			
Stove	11.75	12.25	12.25
Chestnut	11.50	12.00	12.00
Pittsburgh, Pa.:			
Pennsylvania anthracite:			
Chestnut	12.75	12.88	12.75
Bituminous, prepared sizes	3.26	4.75	4.72
Portland, Maine:			
Pennsylvania anthracite:			
Stove	15.84	14.50	14.50
Chestnut	15.60	14.25	14.25
Portland, Oreg.:			
Bituminous, prepared sizes	11.52	12.88	12.79
Providence, R.I.:			
Pennsylvania anthracite:			
Stove	[1] 14.75	[1] 14.75	[1] 14.75
Chestnut	[1] 14.50	[1] 14.50	[1] 14.50
Richmond, Va.:			
Pennsylvania anthracite:			
Stove	13.50	14.00	14.00
Chestnut	13.50	14.00	14.00
Bituminous:			
Prepared sizes:			
High volatile	6.83	7.83	7.83
Low volatile	8.08	8.87	8.88
Run of mine:			
Low volatile	6.75	7.25	7.25
Rochester, N.Y.:			
Pennsylvania anthracite:			
Stove	13.25	13.10	13.10
Chestnut	13.00	12.85	12.85
St. Louis, Mo.:			
Pennsylvania anthracite:			
Stove	15.22	13.91	13.91
Chestnut	15.22	13.72	13.72
Bituminous, prepared sizes	5.44	5.55	5.54
St. Paul, Minn.:			
Pennsylvania anthracite:			
Stove	17.35	15.50	15.50
Chestnut	17.10	15.25	15.25
Bituminous:			
Prepared sizes:			
High volatile	9.40	9.98	9.78
Low volatile	11.86	12.33	12.33
Salt Lake City, Utah:			
Bituminous, prepared sizes	7.01	7.78	7.80
San Francisco, Calif.:			
New Mexico anthracite:			
Cerillos egg	25.00	25.63	25.63
Colorado anthracite:			
Egg	24.50	25.11	25.11
Bituminous, prepared sizes	15.00	16.06	16.06
Savannah, Ga.:			
Bituminous, prepared sizes	[2] 8.28	[2] 10.04	[2] 10.04

[1] The average price of coal delivered in bins is 50 cents higher than here shown. Practically all coal is delivered in bins.

[2] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

TABLE 3.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, JAN. 15 AND DEC. 15, 1933, AND JAN. 15, 1934, BY CITIES—Continued

City and kind of coal	1933		1934
	Jan. 15	Dec. 15	Jan. 15
Scranton, Pa.:			
Pennsylvania anthracite:			
Stove	$8.93	$8.85	$8.85
Chestnut	8.68	8.60	8.60
Seattle, Wash.:			
Bituminous, prepared sizes	9.79	9.73	9.92
Springfield, Ill.:			
Bituminous, prepared sizes	3.68	4.09	4.06
Washington, D.C.:			
Pennsylvania anthracite:			
Stove	[1] 14.46	[1] 14.45	[1] 14.45
Chestnut	[1] 14.15	[1] 14.15	[1] 14.15
Washington, D.C.—Contd.			
Bituminous:			
Prepared sizes:			
High volatile	[1] $8.18	[1] $8.64	[1] $8.64
Low volatile	[1] 10.13	[1] 10.31	[1] 10.31
Run of mine:			
Mixed	[1] 7.50	[1] 7.88	[1] 7.98

[1] Per ton of 2,240 pounds.

WHOLESALE PRICES

THE Bureau of Labor Statistics of the United States Department of Labor collects wholesale market prices for index number purposes of 784 individual items. An index number is compiled from the individual price series to show the trend of wholesale commodity prices. Each item is weighted according to its relative importance in the country's markets, with the average for the year 1926 used as the base in calculating the index. The list of articles is classified into 10 major groups of commodities, which in turn are broken down into subgroups of closely related items. The method used in the compiling of the data and in calculating the index is explained in the introduction to Bulletin No. 493, Wholesale Prices 1913 to 1928, issued by the Bureau of Labor Statistics.

Yearly and monthly indexes by groups of commodities have been constructed since January 1890. To this series has been spliced the index of wholesale prices taken from the Report of the Committee of Finance of the United States Senate on Wholesale Prices, Wages, and Transportation, otherwise known as the Aldridge report and extending back to the year 1840. The series of indexes used for the years 1801 to 1840 is that compiled by Prof. Alvin H. Hensen, University of Minnesota. This gives an index number of wholesale prices by years since 1801 and by months since 1890.

The number of commodities included in the index has varied considerably from time to time. Since January 1926, 784 added price series have been included, 234 of which were added during the revision in 1931. The detailed monthly data for the added items for the years 1926 to 1930, inclusive, have not been published. Annual averages for the 234 added items, however, will be found in Bulletin No. 572. Monthly statistics for all items for the year 1931 are contained in Bulletin No. 572. Monthly prices and indexes since January 1932 are shown in the monthly reports entitled "Wholesale Prices." Averages for the year will be found in the December issue of each year.

For monthly and yearly statistics prior to 1931 reference is made in a footnote on page 1 of Bulletin No. 572 where the information may be located in previous reports. Each monthly report gives prices and index numbers and other statistics relating to the different items for the month indicated on the outside cover in comparison with the previous month and the corresponding month a year ago. Sum-

mary data for certain former periods are also contained in current reports.

Since January 1932 the Bureau has calculated and issued a weekly index number of wholesale prices. Indexes are published only for the 10 major groups of commodities and the special group, "All commodities other than farm products and foods." Weekly prices of individual items are not published in any form.

Wholesale Prices, 1913 to January 1934

TABLE 1 presents index numbers of wholesale prices by groups of commodities by years, from 1913 to 1933, inclusive, by months from January 1933 to January 1934, inclusive, and by weeks for January 1934.

TABLE 1.—INDEX NUMBERS OF WHOLESALE PRICES

[1926=100]

Period	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
By years:											
1913	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.3	93.1	69.8
1914	71.2	64.7	70.9	54.6	56.6	80.2	52.7	81.4	56.8	89.9	68.1
1915	71.5	65.4	75.5	54.1	51.8	86.3	53.5	112.0	56.0	86.9	69.5
1916	84.4	75.7	93.4	70.4	74.3	116.5	67.6	160.7	61.4	100.6	85.5
1917	129.0	104.5	123.8	98.7	105.4	150.6	88.2	165.0	74.2	122.1	117.5
1918	148.0	119.1	125.7	137.2	109.2	136.5	98.6	182.3	93.3	134.4	131.3
1919	157.6	129.5	174.1	135.3	104.3	130.9	115.6	157.0	105.9	139.1	138.6
1920	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5	154.4
1921	88.4	90.6	109.2	94.5	96.8	117.5	97.4	115.0	113.0	109.2	97.6
1922	93.8	87.6	104.6	100.2	107.3	102.9	97.3	100.3	103.5	92.8	96.7
1923	98.6	92.7	104.2	111.3	97.3	109.3	108.7	101.1	108.9	99.7	100.6
1924	100.0	91.0	101.5	106.7	92.0	106.3	102.3	98.9	104.9	93.6	98.1
1925	109.8	100.2	105.3	108.3	96.5	103.2	101.7	101.8	103.1	109.0	103.5
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
By months:											
1933:											
January	42.6	55.8	68.9	51.9	66.0	78.2	70.1	71.6	72.9	61.2	61.0
February	40.9	53.7	68.0	51.2	63.6	77.4	69.8	71.3	72.3	59.2	59.8
March	42.8	54.6	68.1	51.3	62.9	77.2	70.3	71.2	72.2	58.9	60.2
April	44.5	56.1	69.4	51.8	61.5	76.9	70.2	71.4	71.5	57.8	60.4
May	50.2	59.4	76.9	55.9	60.4	77.7	71.4	73.2	71.7	58.9	62.7
June	53.2	61.2	82.4	61.5	61.5	79.3	74.7	73.7	73.4	60.8	65.0
July	60.1	65.5	86.3	68.0	65.3	80.6	79.5	73.2	74.8	64.0	68.9
August	57.6	64.8	91.7	74.6	65.5	81.2	81.3	73.1	77.6	65.4	69.5
September	57.0	64.9	92.3	76.9	70.4	82.1	82.7	72.7	79.3	65.1	70.8
October	55.7	64.2	89.0	77.1	73.6	83.0	83.9	72.7	81.2	65.3	71.2
November	56.6	64.3	88.2	76.8	73.5	82.7	84.9	73.4	81.0	65.5	71.1
December	55.5	62.5	89.2	76.4	73.4	83.5	85.6	73.7	81.0	65.7	70.8
1934:											
January	58.7	64.3	89.5	76.5	73.1	85.5	86.3	74.4	80.8	67.5	72.2
By weeks, ending—											
1934:											
January 6	57.4	62.7	90.0	76.0	74.3	83.3	85.5	73.3	81.7	65.9	71.0
January 13	58.6	64.2	90.2	76.1	74.4	83.7	85.6	73.5	81.7	66.2	71.7
January 20	59.0	64.6	90.3	76.4	74.2	85.1	86.5	75.0	81.7	67.5	72.3
January 27	59.5	65.0	90.4	76.4	74.0	84.7	86.2	75.1	81.7	68.1	72.4

Purchasing Power of the Dollar, 1913 to January 1934

CHANGES in the buying power of the dollar expressed in terms of wholesale prices from 1913 to January 1934 are shown in table 2. The figures in this table are reciprocals of the index numbers. To illustrate, the index number representing the level of all commodities at wholesale in January 1934 with average prices for the year 1926 as the base, is shown to be 72.2. The reciprocal of this index number is 0.01385 which, translated into dollars and cents, becomes $1.385. The table shows that the dollar expanded so much in its buying value that $1 of 1926 had increased in value to $1.385 in January 1934 in the purchase of all commodities at wholesale.

The purchasing power of the dollar for all groups and subgroups of commodities for the current month will be found on page 745 of this publication.

TABLE 2.—PURCHASING POWER OF THE DOLLAR EXPRESSED IN TERMS OF WHOLESALE PRICES

[1926=$1]

Period	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
By years:											
1913	$1.399	$1.558	$1.468	$1.745	$1.631	$1.101	$1.764	$1.247	$1.776	$1.074	$1.433
1914	1.404	1.546	1.410	1.832	1.767	1.247	1.898	1.229	1.761	1.112	1.468
1915	1.399	1.529	1.325	1.848	1.931	1.159	1.869	.893	1.786	1.151	1.439
1916	1.185	1.321	1.071	1.420	1.346	.858	1.479	.622	1.629	.994	1.170
1917	.775	.957	.808	1.013	.949	.664	1.134	.606	1.348	.819	.851
1918	.676	.840	.796	.729	.916	.733	1.014	.549	1.072	.744	.762
1919	.635	.772	.574	.739	.959	.764	.865	.637	.944	.719	.722
1920	.664	.728	.584	.607	.611	.669	.666	.607	.705	.597	.648
1921	1.131	1.104	.916	1.058	1.033	.851	1.027	.870	.885	.961	1.025
1922	1.066	1.142	.956	.998	.932	.972	1.028	.997	.966	1.078	1.034
1923	1.014	1.079	.960	.898	1.028	.915	.920	.989	.918	1.003	.994
1924	1.000	1.099	.985	.937	1.087	.941	.978	1.011	.953	1.068	1.019
1925	.911	.998	.950	.923	1.036	.969	.983	.982	.970	.917	.966
1926	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1927	1.006	1.034	.929	1.046	1.133	1.038	1.056	1.033	1.026	1.099	1.048
1928	.944	.990	.824	1.047	1.186	1.031	1.063	1.046	1.052	1.171	1.034
1929	.953	1.001	.917	1.106	1.205	.995	1.048	1.062	1.060	1.211	1.049
1930	1.133	1.105	1.000	1.245	1.274	1.086	1.112	1.122	1.079	1.287	1.157
1931	1.543	1.340	1.161	1.508	1.481	1.183	1.263	1.261	1.178	1.433	1.370
1932	2.075	1.639	1.372	1.821	1.422	1.247	1.401	1.361	1.332	1.553	1.543
1933	1.946	1.653	1.236	1.543	1.508	1.253	1.299	1.377	1.319	1.600	1.517
By months:											
1933:											
January	2.347	1.792	1.451	1.927	1.515	1.279	1.427	1.397	1.372	1.634	1.639
February	2.445	1.862	1.471	1.953	1.572	1.292	1.433	1.403	1.383	1.689	1.672
March	2.336	1.832	1.468	1.949	1.590	1.295	1.422	1.404	1.385	1.698	1.661
April	2.247	1.783	1.441	1.931	1.626	1.300	1.425	1.401	1.399	1.730	1.656
May	1.992	1.684	1.300	1.789	1.656	1.287	1.401	1.366	1.395	1.698	1.595
June	1.880	1.634	1.214	1.626	1.626	1.261	1.339	1.357	1.362	1.645	1.538
July	1.664	1.527	1.159	1.471	1.531	1.241	1.258	1.366	1.337	1.563	1.451
August	1.736	1.543	1.091	1.340	1.527	1.232	1.230	1.368	1.289	1.529	1.439
September	1.754	1.541	1.083	1.300	1.420	1.218	1.209	1.376	1.261	1.536	1.412
October	1.795	1.558	1.124	1.297	1.359	1.205	1.192	1.376	1.232	1.531	1.404
November	1.767	1.555	1.134	1.302	1.361	1.209	1.178	1.362	1.235	1.527	1.406
December	1.802	1.600	1.121	1.309	1.362	1.198	1.168	1.357	1.235	1.522	1.412
1934:											
January	1.704	1.555	1.117	1.307	1.368	1.170	1.159	1.344	1.238	1.481	1.385
By weeks ending—											
1934:											
January 6	1.742	1.595	1.111	1.316	1.346	1.200	1.170	1.364	1.224	1.517	1.408
January 13	1.706	1.558	1.109	1.314	1.344	1.195	1.168	1.361	1.224	1.511	1.395
January 20	1.695	1.548	1.107	1.309	1.348	1.175	1.156	1.333	1.224	1.481	1.383
January 27	1.681	1.538	1.106	1.309	1.351	1.181	1.160	1.332	1.224	1.468	1.381

Table 3 shows index numbers for special groups of commodities by years from 1913 to 1933, inclusive, and by months from January 1933 to January 1934, inclusive. A list of the commodities included in each of the groups will be found on pages 11 and 12 of Bulletin No. 572.

TABLE 3.—INDEX NUMBERS OF SPECIFIED GROUPS OF COMMODITIES

[1926=100]

Year	Raw materials	Semi-manufactured articles	Finished products	Non-agricultural commodities	All commodities other than farm products and foods	Month	Raw materials	Semi-manufactured articles	Finished products	Non-agricultural commodities	All commodities other than farm products and foods
1913	68.8	74.9	69.4	69.0	70.0	1933:					
1914	67.6	79.0	67.8	66.8	66.4	January	50.2	56.9	66.7	64.9	67.3
1915	67.2	81.2	68.9	68.5	68.0	February	48.4	56.3	65.7	63.7	66.0
1916	82.6	118.3	82.3	85.3	88.3	March	49.4	56.9	65.7	63.8	65.8
1917	122.6	150.4	109.2	113.1	114.2	April	50.0	57.3	65.7	63.7	65.3
1918	135.8	153.8	124.7	125.1	124.6	May	53.7	61.3	67.2	65.4	66.5
1919	145.9	157.9	130.6	131.6	128.8	June	56.2	65.3	69.0	67.4	68.9
1920	151.8	198.2	149.8	154.8	161.3	July	61.8	69.1	72.2	70.7	72.2
1921	88.3	96.1	103.3	100.1	104.9	August	60.6	71.7	73.4	72.0	74.1
1922	96.0	98.9	96.5	97.3	102.4	September	61.7	72.9	74.8	73.7	76.1
1923	98.5	118.6	99.2	100.9	104.3	October	61.8	72.8	75.4	74.4	77.2
1924	97.6	108.7	96.3	97.1	99.7	November	62.4	71.4	75.2	74.2	77.2
1925	106.7	105.3	100.6	101.4	102.6	December	61.9	72.3	74.8	74.0	77.5
1926	100.0	100.0	100.0	100.0	100.0	1934:					
1927	96.5	94.3	95.0	94.6	94.0	January	64.1	71.9	76.0	75.0	78.3
1928	99.1	94.5	95.9	94.8	92.9						
1929	97.5	93.9	94.5	93.3	91.6						
1930	84.3	81.8	88.0	85.9	85.2						
1931	65.6	69.0	77.0	74.6	75.0						
1932	55.1	59.3	70.3	68.3	70.2						
1933	56.5	65.4	70.5	69.0	71.2						

Processing Taxes and the Price Index

THE Agricultural Adjustment Act provided that "to obtain revenue for extraordinary expenses incurred by reason of the national economic emergency, there shall be levied processing taxes * * *."[1] In accordance with this act, the Secretary of Agriculture established a processing tax of 30 cents a bushel on wheat, effective July 10, 1933. There was also declared, effective August 1, 1933, a processing tax of 4.2 cents per pound on cotton. On September 14, the Secretary of Agriculture announced a processing tax, effective October 1, on leaf tobacco of 1.7 cents per pound for Maryland tobacco and 3 cents per pound for tobacco from other States.

The corn-hog ratio was declared effective as of November 5. The tax on corn is announced as 5 cents per bushel of 56 pounds. For hogs, the following taxes have been announced: Effective November 5, 50 cents per 100 pounds live weight; December 1, $1; and February 1, $1.50. These taxes are still in effect.

In all cases these taxes are to be collected by the Bureau of Internal Revenue on "the first domestic processing" of each raw material.

[1] Pt. 2, sec. 9, par. a, H.R. 3835, approved May 12, 1933.

No tax is to be paid by the purchaser of the raw materials when such materials are to be used by the farmer for purposes of feeding or otherwise. The tax is to be paid by the purchaser of the raw materials when such materials are to be processed or converted into other items for further sale.

As considerable portions of these raw materials are not purchased for processing it is not justifiable to include these taxes in regular market quotations. The index number of the Bureau of Labor Statistics, showing the general trend of wholesale commodity prices, represents market prices, and therefore prices used in the calculation of these indexes for articles subject to the processing tax do not include such taxes.

In order that the effect of processing taxes on the index numbers of the Bureau of Labor Statistics may be shown, there has been calculated a series of wholesale price indexes for the major groups and subgroups of farm products, including the articles upon which taxes have been assessed, for the period during which they have been effective. Table 4 shows the comparison of the regular series of index numbers of the Bureau for farm products with the indexes based upon prices including processing taxes:

TABLE 4.—INDEX NUMBERS OF WHOLESALE PRICES OF FARM PRODUCTS WITH AND WITHOUT PROCESSING TAXES

[1926=100]

Month	Grains		Livestock and poultry		Other farm products		All farm products	
	Without tax	With tax	Without tax	With tax	Without tax	With tax	Without tax	With tax
1933:								
July	73.4	83.2	----------	----------	----------	----------	60.1	61.7
August	64.6	77.5	----------	----------	62.5	67.7	57.6	62.5
September	63.9	76.8	----------	----------	61.2	66.8	57.0	62.1
October	58.2	71.1	----------	----------	61.2	67.5	55.7	61.2
November	61.3	75.4	41.2	43.0	64.3	70.6	56.6	62.8
December	60.4	74.8	38.0	42.2	64.3	70.6	55.5	62.5
1934:								
January	63.7	78.0	41.1	45.3	67.4	73.7	58.7	65.6

It will be seen from the above that the index numbers of the individual groups of farm products have been affected by the processing tax. The index number for grains for January, excluding the tax on wheat, was 63.7 as compared with 78 when the tax was included, showing a differential of 22 percent between the two figures. The index number for other farm products for the same month, excluding the tax on cotton and tobacco, was 67.4. Including these taxes, the index is 73.7. The differential between the two series was 9 percent. Including the corn-hog ratio the index number of livestock and poultry for the month was 45.3, and excluding the corn-hog ratio the index was 41.1, showing a differential of over 10 percent. For all farm

products for the month of January the index number of the regular series is 58.7 as compared with 65.6 with all taxes added, showing a differential of about 12 percent between the two indexes.

Wholesale Price Trends During January 1934

WHOLESALE commodity prices during January increased 2 percent. The index number for the month rose to 72.2 percent of the 1926 average as compared with 70.8 percent for December.

The upward movement in prices was well scattered throughout the 10 major groups of commodities, with 8 of the groups showing advances and only 2, fuel and lighting materials and house-furnishing goods, recording slight decreases. Of the 784 price series 242 or more than 30 percent of the total carried in the index showed an increase, while decreases were registered in only 118 instances, with 424 items showing no change. How the various commodity groups acted during the month of January is shown in table 5:

TABLE 5.—COMMODITIES SHOWING CHANGES IN PRICE BETWEEN DECEMBER AND JANUARY

Group	Increases	Decreases	No change	Total
Farm products	55	9	3	67
Foods	57	25	40	122
Hides and leather products	8	14	19	41
Textile products	31	18	63	112
Fuel and lighting	7	11	6	24
Metals and metal products	24	13	93	130
Building materials	25	5	56	86
Chemicals and drugs	13	12	64	89
House-furnishing goods	5	8	48	61
Miscellaneous	17	3	32	52
Total	242	118	424	784

Among the important price increases were 29 percent for fresh apples, 16 percent for potatoes, 12 percent for lard, 10 percent for cotton, 6 percent for meats, 5 percent for grains, and 3 percent for butter, cheese, and flour.

The index shows an increase of more than 18 percent over prices of January 1933, when it was 61. The present average is nearly 21 percent higher than for the month of February 1933, when prices had reached their low point (on a monthly basis), with an index of 59.8. As compared with the average for the year 1929, when the index stood at 95.3, prices last month were lower by 24 percent. The comparable index for January of 1930 was 92.5, for January 1931 was 78.2, and for January 1932 was 67.3.

The largest increase was shown for the farm products group, which rose more than 5 percent during the month. The index for the group is 43.5 percent above the low point of February 1933, and more than 37 percent higher than in January of a year ago. Among the important farm products which showed price increases between

the 2 months were grains, livestock, poultry, cotton, fresh fruits, tobacco, and wool. Average prices for alfalfa hay, hops, fresh milk in Chicago and San Francisco, and clover seed, on the other hand, registered price declines.

Wholesale prices of foods showed the second largest price increase, the group as a whole advancing nearly 3 percent. The index for the group is nearly 20 percent above February 1933 and about 15 percent higher than the corresponding month of last year. Price increases in this group affected cereals, meats, fruits and vegetables, cocoa beans, coffee, pepper, and certain vegetable oils. Raw and granulated sugar were the more important items showing a weakening in prices.

The miscellaneous group of items registered a rise of 2.8 percent during the month. Market prices of cattle feed rose nearly 10 percent. Crude rubber continued to show a decided strengthening of prices. Advances in wholesale prices of cigars and cigarettes and of cylinder oils were in the main responsible for the 3.5-percent rise in other miscellaneous items. No change was recorded for automobile tires and tubes.

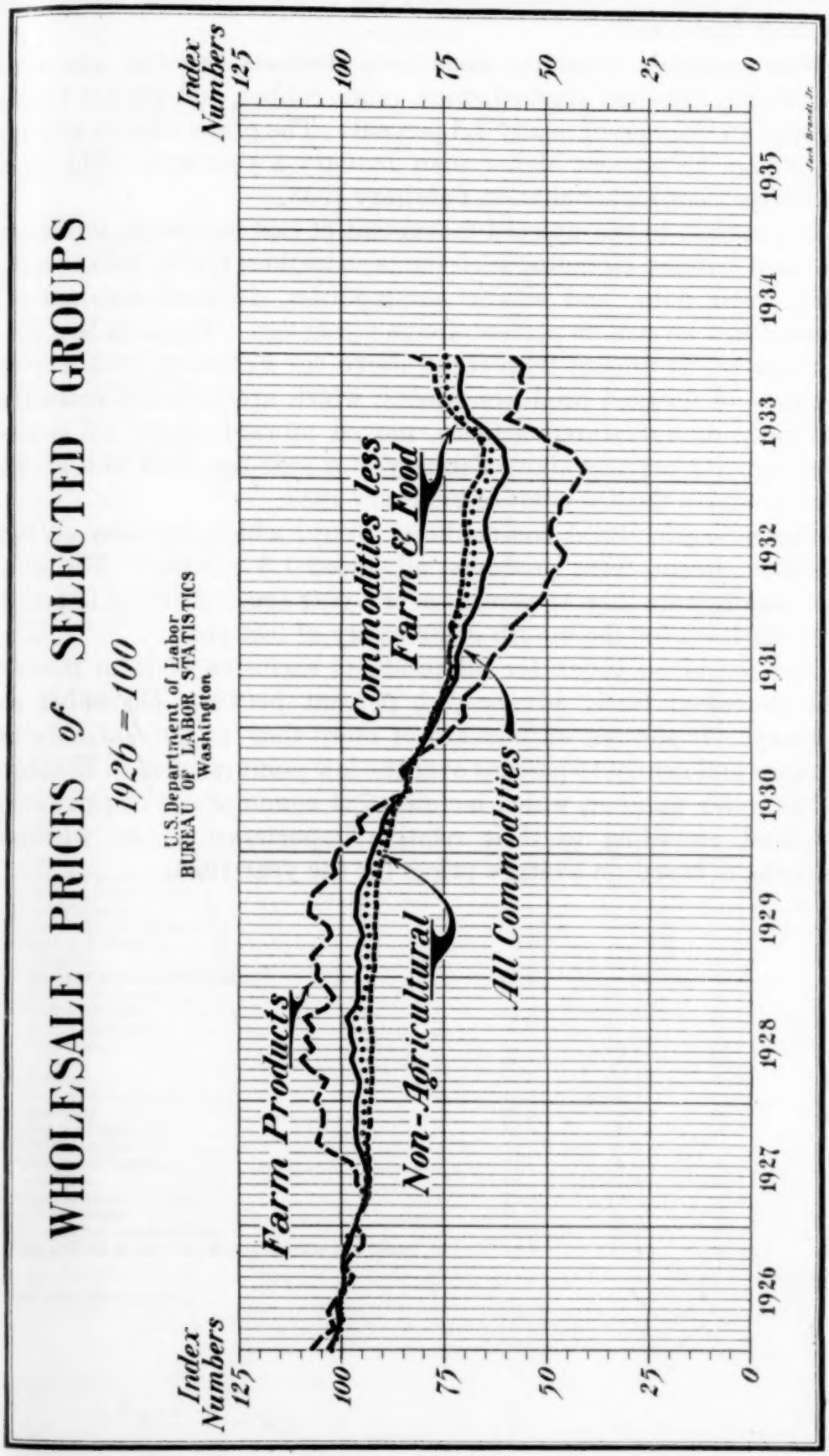
An advance of nearly 2.5 percent was shown in the metals and metal products group. The rise was due to increasing prices of certain agricultural implements and motor vehicles. The indexes for iron and steel and plumbing and heating items remained unchanged, while the average of nonferrous metals showed a slight decline.

Stronger market prices for cotton textiles, silk and rayon, burlap, jute, and sisal more than counterbalanced weakening prices of clothing and knit goods, causing the textile products group as a whole to increase one tenth of 1 percent. Price decreases for coke, gas, Pennsylvania fuel oil, and gasoline were largely responsible for the slight drop in the fuel and lighting group. Bituminous coal registered an advance, while anthracite coal and crude petroleum showed no change from the December level.

The hides and leather group advanced three tenths of 1 percent from December to January, due to rising prices of hides and skins. In this group the average price of boots and shoes, leather, and other leather products showed an easing off during the month.

The building materials group registered a further price advance and increased nearly 1 percent. Brick and tile, cement, paint, paint materials, and other building materials shared in the upward movement. Lumber declined slightly, while structural steel remained at the level of the month before.

The group of chemicals and drugs increased 1 percent due mainly to rising prices of grain alcohol, mixed fertilizers, and fertilizer materials. The subgroup of chemicals showed minor price declines.


WHOLESALE PRICES of SELECTED GROUPS
1926 = 100
U.S. Department of Labor
BUREAU OF LABOR STATISTICS
Washington
Index Numbers
125
100
75
50
25
0
Farm Products
Commodities less Farm & Food
Non-Agricultural
All Commodities
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
Jack Brandt, Jr.

Declining prices of furniture caused the house-furnishing-goods group to drop fractionally.

Raw materials, including basic farm products, raw silk, coal, crude petroleum, iron ore, crushed stone, crude rubber, and similar articles, showed an increase of nearly 3.5 percent. The present index averaged more than 27 percent higher than January a year ago. This group was 32 percent higher than in February 1933.

In contrast to the upward movement of raw materials, semimanufactured articles, including such items as leather, rayon, iron and steel bars, wood pulp, and similar commodities, declined one half of 1 percent to a level of 26 percent above a year ago. Prices of this group of items are at present 28 percent above the February 1933 average.

Prices of finished products, among which are included more than 500 fully manufactured articles, moved upward about 1.5 percent to a point 14 percent above January of a year ago, and to a level 16 percent above the low point of February 1933.

The nonagricultural commodities group, which includes all commodities except farm products, advanced 1.3 percent. The group now stands more than 15 percent over a year ago and nearly 18 percent over the level for the month of February of last year.

The combined index for all products exclusive of farm products and processed foods advanced 1 percent between December and January. It showed an increase of more than 16 percent over last January and nearly 19 percent over the low point reached in February.

The index number, which includes 784 commodities or price series weighted according to their relative importance in the wholesale markets, is based on average prices for the year 1926.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Groups and subgroups	January 1934	December 1933	January 1933	Purchasing power of dollar, January 1934
All commodities	72.2	70.8	61.0	$1.385
Farm products	58.7	55.5	42.6	1.704
Grains	63.7	60.4	32.9	1.570
Livestock and poultry	41.1	38.0	37.8	2.433
Other farm products	67.4	64.3	48.7	1.484
Foods	64.3	62.5	55.8	1.555
Butter, cheese, and milk	65.0	65.1	55.2	1.538
Cereal products	85.8	84.7	60.9	1.166
Fruits and vegetables	68.0	63.0	53.0	1.471
Meats	48.9	46.0	49.5	2.045
Other foods	64.0	63.4	60.1	1.563
Hides and leather products	89.5	89.2	68.9	1.117
Boots and shoes	98.5	98.6	83.3	1.015
Hides and skins	77.2	74.9	43.0	1.295
Leather	79.9	80.1	57.1	1.252
Other leather products	87.0	87.6	78.2	1.149
Textile products	76.5	76.4	51.9	1.307
Clothing	87.5	87.9	61.9	1.143
Cotton goods	86.5	85.5	50.1	1.156
Knit goods	70.6	71.2	48.4	1.416
Silk and rayon	29.7	29.6	27.0	3.367
Woolen and worsted goods	84.3	84.3	53.4	1.186
Other textile products	76.9	75.9	66.3	1.300
Fuel and lighting materials	73.1	73.4	66.0	1.368
Anthracite coal	81.5	81.5	88.7	1.227
Bituminous coal	90.8	90.6	79.8	1.101
Coke	83.5	83.6	75.3	1.198
Electricity	[1]	94.0	103.2	----------
Gas	[1]	92.2	96.7	----------
Petroleum products	51.1	51.6	38.7	1.957
Metals and metal products	85.5	83.5	78.2	1.170
Agricultural implements	85.2	85.1	84.5	1.174
Iron and steel	83.6	83.6	78.5	1.196
Motor vehicles	96.9	90.9	91.3	1.032
Nonferrous metals	66.1	66.6	46.4	1.513
Plumbing and heating	72.5	72.5	62.8	1.379
Building materials	86.3	85.6	70.1	1.159
Brick and tile	86.6	85.7	74.9	1.155
Cement	93.9	91.2	81.2	1.065
Lumber	87.4	88.0	55.9	1.144
Paint and paint materials	78.4	77.5	68.1	1.276
Plumbing and heating	72.5	72.5	62.8	1.379
Structural steel	86.8	86.8	81.7	1.152
Other building materials	89.8	88.6	79.4	1.114
Chemicals and drugs	74.4	73.7	71.6	1.344
Chemicals	78.8	79.2	79.3	1.269
Drugs and pharmaceuticals	65.2	59.0	54.9	1.534
Fertilizer materials	68.4	68.1	62.3	1.462
Mixed fertilizers	71.2	69.9	62.7	1.404
House-furnishing goods	80.8	81.0	72.9	1.238
Furnishings	82.9	82.9	73.5	1.206
Furniture	78.8	79.3	72.3	1.269
Miscellaneous	67.5	65.7	61.2	1.481
Automobile tires and tubes	43.2	43.2	44.6	2.315
Cattle feed	68.5	60.3	38.2	1.460
Paper and pulp	83.0	82.5	72.0	1.205
Rubber, crude	18.9	18.0	6.5	5.291
Other miscellaneous	81.8	79.0	76.8	1.222
Raw materials	64.1	61.9	50.2	1.560
Semimanufactured articles	71.9	72.3	56.9	1.391
Finished products	76.0	74.8	66.7	1.316
Nonagricultural commodities	75.0	74.0	64.9	1.333
All commodities other than farm products and foods	78.3	77.5	67.3	1.277

[1] Data not yet available.

Wholesale Prices in the United States and in Foreign Countries

IN THE following table the index numbers of wholesale prices of the Bureau of Labor Statistics of the United States Department of Labor, and those in certain foreign countries, have been brought together in order that the trend of prices in the several countries may be compared. The base periods here shown are those appearing in the original sources from which the information has been drawn, in certain cases being the year 1913 or some other pre-war period. Only general comparisons can be made from these figures, since, in addition to differences in the base periods, and the kind and number of articles included, there are important differences in the composition of the index numbers themselves. Indexes are shown for the years 1926–33, inclusive, and by months since January 1932.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES

Country	United States	Australia	Austria	Belgium	Bulgaria	Canada	Chile	China
Computing agency	Bureau of Labor Statistics	Bureau of Census and Statistics	Federal Statistical Bureau	Ministry of Industry and Labor	General Statistical Bureau	Dominion Bureau of Statistics	General Statistical Bureau	National Tariff Commission, Shanghai
Base period	1926 (100)	1911 (1,000)	January–June 1914 (100)	April 1914 (100)	1926 (100)	1926 (100)	1913 (100)	1926 (100)
Commodities	784	92	(Gold) 47	(Paper) 125	(Gold) 55	502	(Paper)	(Silver) 155 [1]
1926	100.0	1,832	123	744	100.0	100.0		100.0
1927	95.4	1,817	133	847	102.4	97.7		104.4
1928	96.7	1,792	130	843	109.8	96.4	192.5	101.7
1929	95.3	1,803	130	851	117.0	95.6	192.4	104.5
1930	86.4	1,596	117	744	94.6	86.6	166.9	114.8
1931	73.0	1,428	108	626	79.1	72.1	152.2	126.7
1932	64.8	1,411	112	532	70.3	66.7	230.4	112.4
1933	65.9		108	501		67.2		103.3
1932								
January	67.3	1,414	114	557	75.7	69.4	146.5	119.3
February	66.3	1,449	112	554	75.9	69.2	151.9	
March	66.0	1,438	113	548	75.9	69.1	164.2	
April	65.5	1,431	112	539	72.4	68.2	189.8	116.7
May	64.4	1,408	116	526	71.7	67.4	213.0	115.7
June	63.9	1,390	115	514	71.7	66.4	226.6	113.6
July	64.5	1,397	112	512	69.2	66.4	230.2	111.8
August	65.2	1,415	112	524	67.9	66.7	239.6	111.3
September	65.3	1,441	110	533	66.9	65.9	281.6	109.8
October	64.4	1,404	111	529	64.5	65.0	293.9	108.7
November	63.9	1,382	111	525	63.3	64.7	289.0	106.9
December	62.6	1,367	108	522	62.5	64.0	337.8	107.5
1933								
January	61.0	1,344	108	521	63.5	63.9	346.0	108.6
February	59.8	1,330	106	512	62.4	63.6	344.7	107.6
March	60.2	1,333	107	504	61.0	64.4	343.4	106.7
April	60.4	1,358	107	501	61.5	65.4	351.2	104.5
May	62.7	1,406	108	502	62.1	66.9	357.3	104.2
June	65.0	1,439	109	507	61.3	67.6	357.8	104.5
July	68.9	1,455	111	506	62.6	70.5	353.2	103.4
August	69.5	1,464	108	501	60.9	69.4	355.8	101.7
September	70.8	1,481	108	496	62.4	68.9	351.5	100.4
October	71.2	1,445	109	489	61.0	67.9	338.5	100.3
November	71.1	1,416	108	485		68.7		99.9
December	70.8		108	484		69.0		98.4

[1] Quotations, 154 since January 1932.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Czechoslovakia	Denmark	Finland	France	Germany	India	Italy	Japan
Computing agency	Central Bureau of Statistics	Statistical Department	Central Bureau of Statistics	General Statistical Bureau	Federal Statistical Bureau	Department, etc.,[3] Calcutta	Riccardo Bachi	Bank of Japan, Tokyo
Base period	July 1914 (100)	1913 (100)	1926 (100)	1913 (100)	1913 (100)	July 1914 (100)	1913 (100)	October 1900 (100)
Commodities	(Gold) 69	118	120	(Paper) 126	400	(Paper) 72	(Paper) 140	56
1926	[2] 944	163	100	695	134.4	148	602.0	236.7
1927	[2] 968	153	101	642	137.6	148	495.3	224.6
1928	[2] 969	153	102	645	140.0	145	461.6	226.1
1929	[2] 913	150	98	627	137.2	141	445.3	219.8
1930	118.6	130	90	554	124.6	116	383.0	181.0
1931	107.5	114	84	502	110.9	96	328.4	153.0
1932	99.5	117	90	427	96.5	91	303.7	161.1
1933	96.3	125	89	399	93.3	87	279.5	179.5
1932								
January	102.3	118	94	439	100.0	97	316.6	159.5
February	101.4	119	93	446	99.8	97	314.4	161.4
March	101.4	117	92	444	99.8	94	315.0	158.5
April	100.7	115	89	439	98.4	92	311.3	154.1
May	99.5	114	88	438	97.2	89	305.1	150.3
June	97.3	113	87	425	96.2	86	297.4	146.4
July	98.0	115	89	430	95.9	87	295.7	147.7
August	97.9	117	89	415	95.4	91	296.6	155.8
September	100.1	119	90	413	95.1	91	299.6	167.4
October	99.5	118	90	412	94.3	91	298.6	169.1
November	99.1	120	91	413	93.9	90	298.2	177.9
December	99.0	119	90	413	92.4	88	295.8	184.6
1933								
January	96.6	117	90	411	91.0	88	292.0	185.0
February	96.3	124	89	404	91.2	86	286.3	179.6
March	95.5	123	89	390	91.1	82	281.3	177.4
April	94.6	122	88	387	90.7	84	279.1	176.2
May	96.3	123	88	383	91.9	87	278.8	176.8
June	98.3	123	89	403	92.9	89	281.2	179.6
July	98.3	125	90	401	93.9	91	278.9	182.1
August	97.4	126	90	397	94.2	89	278.3	180.0
September	96.5	128	90	397	94.9	88	275.8	182.4
October	96.2	127	90	397	95.7	88	274.1	180.4
November	95.7	128	90	403	96.0	88	272.9	178.7
December	95.0	129	89	407	96.2	89	275.3	175.5

[2] Paper revised.
[3] Department of Commercial Intelligence and Statistics

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN FOREIGN COUNTRIES—Continued

Country	Jugoslavia	Netherlands	New Zealand revised	Norway	Poland	South Africa	Spain	Sweden	Switzerland	United Kingdom
Computing agency	National Bank	Central Bureau of Statistics	Census and Statistics Office	Central Bureau of Statistics	Central Office of Statistics	Office of Census and Statistics	Bureau of Labor Statistics	Board of Trade	Federal Labor Department	Board of Trade
Base period	1926 (100)	1913 (100)	1909–13 (1,000)	1913 (100)	1927 (100)	1910 (1,000)	1913 (100)	1913 (100)	July 1914 (100)	1924 (100)
Commodities	55	48	180	95	73	188	74	160	78	150
1926	100.0	145	1553	.....	88.7	1387	181	149	144.5	89.1
1927	103.4	148	1478	.....	100.0	1395	172	146	142.6	85.2
1928	106.2	149	1492	157	101.0	1354	167	148	144.6	84.4
1929	100.6	142	1488	149	95.7	1305	171	140	141.2	82.1
1930	86.8	117	1449	137	82.3	1155	172	122	126.5	71.9
1931	72.9	97	1346	122	70.5	1119	174	111	109.7	62.6
1932	65.2	79	1297	122	61.7	1031	173	109	96.0	61.1
1933	64.4	74	.....	122	56.2	1029	.....	107	91.0	60.7
1932										
January	67.8	84	1344	123	63.9	1083	176	109	101.4	63.7
February	67.3	83	1330	123	64.6	.....	178	110	99.6	63.4
March	67.8	82	1325	122	63.8	.....	180	109	98.7	63.0
April	66.1	80	1316	120	65.3	1062	181	109	97.7	61.6
May	65.4	79	1313	120	66.1	.....	177	109	95.6	60.6
June	64.9	78	1308	120	61.8	.....	174	108	94.5	59.0
July	65.6	76	1308	122	60.4	1002	172	108	93.6	58.8
August	62.6	75	1308	123	60.2	.....	171	108	95.0	59.9
September	61.8	76	1311	123	60.2	.....	170	110	94.8	61.4
October	63.9	77	1304	123	58.8	978	169	110	94.8	60.8
November	64.7	77	1286	124	58.4	.....	170	109	92.4	60.8
December	64.8	76	1273	123	56.1	.....	169	108	91.8	60.8
1933										
January	67.6	75	1266	122	56.3	982	170	106	91.3	60.3
February	68.4	74	1315	121	57.9	.....	168	106	90.1	59.5
March	67.0	72	1316	121	57.9	.....	166	105	90.0	58.7
April	66.3	71	1315	121	57.6	1013	164	105	91.1	58.5
May	64.9	72	1323	121	56.8	.....	163	106	91.6	59.7
June	66.1	73	1321	121	58.2	.....	163	106	91.2	61.2
July	63.7	73	1327	121	58.2	1072	164	108	91.7	61.5
August	60.7	73	1325	122	53.9	.....	.....	108	90.9	61.7
September	60.7	75	1317	123	55.0	.....	.....	109	90.8	62.0
October	61.5	75	1317	123	54.4	1047	.....	109	90.7	61.8
November	63.1	76	1318	122	54.3	.....	.....	110	91.0	61.9
December	62.3	77	.....	122	53.8	.....	.....	110	91.3	61.9

COST OF LIVING

Cost of Living of the Working Classes in Buenos Aires, Argentina [1]

IN ACCORDANCE with an executive decree of September 15, 1932, statistics have been published by the Argentine National Department of Labor on the cost of living of 900 working-class families in Buenos Aires. These figures relate to the calendar year 1931. Since that time the prices for basic foodstuffs have exhibited a marked rise, while, conversely, wages have declined considerably.

While the average annual wage received by each family in 1931 was 1,687.30 paper pesos, expenses totaled 1,739.15 pesos; there was therefore a deficit per family of 51.85 pesos. The average wage for the previous 4 years was 2,035.37 paper pesos. Thus the decrease in wages in 1931, as compared to the previous 4 years, was 348.07 pesos, or 17 percent. At the same time, the number of persons employed as day laborers in Buenos Aires decreased steadily, as is shown by the following figures:

	Number employed
1928	479, 630
1929	476, 932
1930	475, 215
1931	424, 292

Taking as the basis the 1931 average wage of 1,687.30 paper pesos, the monthly expenditures for each family were distributed as follows:

TABLE 1.—MONTHLY EXPENDITURES OF WORKERS' FAMILY IN BUENOS AIRES, 1931, ON BASIS OF ANNUAL EARNINGS OF 1,687.30 PESOS

Item	Amount	Percent
	Pesos	
Food	79. 86	55
Rent	38. 55	27
Clothing	10. 29	7
Other expenses	16. 23	11
Total	144. 93	100

[1] Report of William C. Trimble, American vice consul at Buenos Aires, Sept. 20, 1933.

The distribution of expenses for the years 1926 to 1931 was as follows:

TABLE 2.—PERCENT OF EXPENDITURES OF WORKING-CLASS FAMILIES IN BUENOS AIRES, FOR EACH ITEM, 1926 TO 1931

Year	Percent of total expenditures spent for—			Total
	Food	Rent	Other items	
1926	48.0	22.0	30.0	100.0
1928	51.5	22.5	26.0	100.0
1929	51.0	20.0	29.0	100.0
1930	51.0	24.0	25.0	100.0
1931	55.0	27.0	18.0	100.0

From the above it will be noted that expenditures for food increased 7 percent between 1926 and 1931, while those for rent likewise showed a rise of 5 percent. At the same time the families were forced to economize on their other expenses, such as clothing, medical treatments, etc.

Of the 900 working-class families investigated by the National Department of Labor, it was found that the average family consisted of four persons, the total persons being 3,676. The families occupied, among them, 980 rooms, or an average of 3.8 persons per room. Average prices for such rooms (with light) were as follows:

	Paper pesos
1 room, brick construction	34.85
2 rooms, brick construction	65.25
3 rooms, brick construction	85.00
Living room or dining room	54.00
Living room and 1 other room	81.80
1 room, frame construction	27.25

It was stated that in the majority of these rooms hygienic conditions were extremely bad, being unsanitary, of faulty construction, and without proper ventilation.

A more extensive survey of the costs of living, both in the Federal Capital and the National Territories, is now being carried on. A total of 10,000 families will be examined and from the information thus received it is contemplated that more comprehensive and up-to-date statistics will be secured.

PUBLICATIONS RELATING TO LABOR

Official—United States

MASSACHUSETTS.—Department of Public Welfare. Division of Housing and Town Planning. *Annual report for the year ending November 30, 1933. Boston [1933?]. 12 pp. (Public Doc. No. 103.)*

The report stresses the importance of town planning, and especially of well-considered zoning regulations, well enforced, and points out that a State planning board is much needed, which should first study the best social use to which land may be put, and then develop a master plan in which each development undertaken would be part of a comprehensive whole.

NEW YORK.—Board of Social Welfare. *Sixty-sixth annual report, for the year ending June 30, 1932. Albany, 1933. 236 pp., charts, illus. (Legislative document (1933) No. 22.)*

Summary data on old-age pensions and on care of the aged in public and private homes, taken from this report, are given in this issue of the Monthly Labor Review.

—— Temporary Emergency Relief Administration. *Report, October 15, 1932. Albany [1933?]. 86 pp.*

Included in the major subjects of this pamphlet are: Relief expenditures and trends, home relief, emergency work bureaus, relief standards, and reducing the cost of relief.

PENNSYLVANIA.—Employment Commission. *Employment trends in Philadelphia, by Emmett H. Welch. [Harrisburg], Department of Labor and Industry, 1933. 106 pp., charts.*

Based on reports of United States Census of Occupations and Census of Manufactures, and employment indexes compiled by the Federal Reserve Board.

RHODE ISLAND.—[Department of Labor.] *Report for the year 1932. Providence, 1933. 37 pp.*

Data on workmen's compensation show that reports were received during the year ending September 30, 1932, of 21 fatal and 16,294 nonfatal injuries in 4,779 establishments under the act. Compensation benefits paid for injuries occurring during the year totaled $189,313, and medical costs totaled $227,688, while payments during the year for injuries incurred during previous years totaled $268,964. The report also contains information on strikes, food costs, and employment.

VIRGIN ISLANDS.—Governor. *Annual report, for the fiscal year ended June 30, 1933. Washington, Department of the Interior, 1933. 12 pp.*

Reviews conditions in the Virgin Islands and contains a section dealing with subsistence homesteads, in which "lies St. Croix's chief security for the future."

UNITED STATES.—Civil Service Commission. *Fiftieth annual report, for the fiscal year ended June 30, 1933. Washington, 1933. 66 pp.*

There were 565,432 employees in the Federal executive civil service on June 30, 1933, as compared with 578,231 at the end of the previous fiscal year, a decrease of 12,799 workers. There were approximately 456,096 positions, or about 80 percent of the total, open to competitive examinations on June 30, 1933, a decrease of 11,065 during the year. Most of the net decrease of 12,799 workers in the executive civil service therefore occurred in the competitive classified service. Over 70 percent of the decrease was due to a reduction of 9,201 employees in the Postal Service, which on June 30, 1933, had 270,235 workers, or 47.79 percent of the total. Temporary employees on June 30, 1933, numbered 35,922, or 6.4 percent of the total.

UNITED STATES.—Department of Agriculture. *Economic bases for the Agricultural Adjustment Act, by Mordecai Ezekiel and Louis H. Bean. Washington, 1933. 67 pp., charts.*

—— Department of Commerce. Bureau of Mines. *Bulletin 375: Quarry accidents in the United States during the calendar year 1931, by William W. Adams. Washington, 1933. 50 pp.*
Reviewed in this issue.

—— —— —— *Technical Paper 553: Protection of equipment containing explosive acetone-air mixtures by the use of diaphragms, by G. W. Jones, E. S. Harris, and B. B. Beattie. Washington, 1933. 24 pp., diagrams.*
Presents results of an investigation conducted in cooperation with the Western Electric Co. (Inc.).

—— —— —— *Technical Paper 559: Coke-oven accidents in the United States during the calendar year 1932, by W. W. Adams and L. Chenoweth. Washington, 1933. 15 pp.*
Reviewed in this issue.

—— —— Bureau of the Census. *Fifteenth Census of the United States, 1930: Population, Volume VI, Families—Reports by States, giving statistics for families, dwellings, and homes, by counties, for urban and rural areas, and for urban places of 2,500 or more. Washington, 1933. 1495 pp., map.*

—— Department of Labor. Children's Bureau. *Publication No. 225: Guiding the adolescent, by D. A. Thom. Washington, 1933. 94 pp.*

—— National Recovery Administration. *Bulletin No. 1: Statement by the President of the United States of America outlining policies of the National Recovery Administration. Washington, 1933. 5 pp. Bulletin No. 2: Basic codes of fair competition. Washington, 1933. 5 pp. Bulletin No. 3: The President's reemployment program. Washington, 1933. 9 pp. Bulletin No. 4: What the Blue Eagle means to you and how you can get it. Washington, 1933. 20 pp. Bulletin No. 5: Regulations on procedure for local N.R.A. compliance boards. Washington, 1933. 11 pp. Bulletin No. 6: Substituted wages and hours provisions of the President's reemployment agreement. Washington, 1933. 235 pp. Bulletin No. 7: Manual for the adjustment of complaints by State directors and code authorities. Washington, 1934. 33 pp., chart.*
This makes up the series of National Recovery Administration bulletins to date.

—— Emergency Conservation Work Organization. *First report, for the period April 5, 1933, to September 30, 1933. Washington, 1934. 63 pp.*
An account of the emergency conservation work of the Federal Government is given in this issue of the Monthly Labor Review.

—— War Department. *Annual report of the Secretary of War, [fiscal year ended June 30,] 1933. Washington, 1933. 199 pp.*
Contains a brief account of the Army's part in the recruiting and care of the Civilian Conservation Corps and a report on the United States Soldiers' Home at Washington, D.C.

Official—Foreign Countries

ALBERTA (CANADA).—Workmen's Compensation Board. *Fifteenth annual report for the year ended December 31, 1932. Edmonton, 1932. 46 pp.*
The report shows that 31 fatal and 8,943 nonfatal injuries were reported to the board during the year, or 1,030 less than during the previous year. The total amount of compensation paid was $407,938, and the total amount of medical cost was $204,135. Additional compensation, amounting to $393,199, was paid for injuries sustained during previous years. The importance of accident prevention for the reduction of both suffering and costs is emphasized in the report.

BREMEN (GERMANY).—Statistisches Landesamt. *Statistisches Jahrbuch der freien Hansestadt Bremen, 1933. Bremen, 1933. 142 pp.*

CANADA.—Department of Labor. *Report for the fiscal year ending March 31, 1933. Ottawa, 1933. 75 pp.*
The subjects covered by the report include industrial disputes; conciliation and arbitration; government annuities; free public employment service; the investigation of combines, monopolies, trusts, and mergers; old-age pensions; unemployment relief; and the fair wages policy.

CANADA.—Department of Labor. *Twenty-second annual report on labor organization in Canada (for the calendar year 1932). Ottawa, 1934. 145 pp., charts.*

In 1932 the membership of trade unions in the Dominion showed a net decrease of 26,968 as compared with 1931, in which year the membership was also affected by the industrial depression. The loss in members would have been considerably greater if a number of the unemployed unionists had not been exempted from the per capita tax for certain periods by various organizations.

ESTONIA.—Hariduse- ja Sotsiaalministeerium. *Töökaitse Eestis, 1932. Tallinn, 1933. 62 pp., illus.*

Report on labor protection in Estonia in 1932 as revealed in the reports of the factory inspectors. Includes data on industrial disputes, industrial accidents, cases of lead poisoning, etc. In Estonian, with a résumé in French and French translations of the headings of the main tables.

FINLAND.—Sosialministeriö. Sosialinen Tutkimustoimisto. *Tapaturmatilastoa: Työssä sattuneet tapaturmat, vuonna 1929. Helsingfors, 1933. 61 pp.*

Report on industrial accidents in Finland in 1929, with some comparative data for earlier years. French translations are given of the table of contents and some of the table headings, and there is a short general discussion in French, together with a list of industries and the types and causes of injuries covered by the report.

GREAT BRITAIN.—Home Office. Committee on the Employment of Prisoners. *Report: Part I, Employment of prisoners. London, 1933. 99 pp. (Cmd. 4462.)*

This report of the committee appointed in 1932 to "review the methods of employing prisoners and of assisting them to find employment on discharge, and to report what improvements are desirable and practicable," is devoted to methods of employing prisoners while in confinement. In the main, they are employed only on work for the prison service or for other Government departments. As it is difficult to provide sufficient work to keep them employed, there is danger of their falling into habits of listless and dilatory working which will seriously handicap them when released. The committee recommends that more work should be provided, even though this might necessitate selling prison products in the open market, but suggests that care should be taken to see that such goods are not sold below the normal market price, and that there is no undue interference with wages or employment in any particular industry. The committee also recommends that conditions of work within the prison should be brought more nearly into line with those outside, and that emphasis should be placed on training in habits of application. "Speed and efficiency of work in prison workshops must be improved in order to guard against deterioration of the physical and moral power of instructors and prisoners."

—— Mines Department. Safety in Mines Research Board. *Paper No. 81: The prevention of ignition of firedamp by the heat of impact of coal-cutter picks against hard rocks, by M. J. Burgess and R. V. Wheeler. London, 1933. 14 pp., plans, illus.*

Indicates that the ignition of firedamp from contact of picks with hard rock can be prevented by the discharge of inert gas into the cut.

—— Ministry of Agriculture and Fisheries. *Report of proceedings under the Agricultural Wages (Regulation) Act, 1924, for the year ended September 30, 1931. London, 1932. 77 pp.*

—— Ministry of Health. *Fourteenth annual report, 1932–33. London, 1933. 329 pp. (Cmd. 4372.)*

Contains the usual information as to the work of the health services, housing and town planning, administration of the poor law, national health insurance and contributory pensions, and a separate report of the work of the Welsh Board of Health.

—— Ministry of Labor. *Unemployment bill, 1933: Explanatory memorandum on clauses. London, 1933. 52 pp. (Cmd. 4464.)*

Does not include the text of the bill, nor the financial memorandum which accompanied it, but for each clause gives a statement explaining its purpose, stating what provisions in the corresponding clause of the earlier bills are repealed, modified, or embodied, and sets forth the method in which the new clause is expected to work.

GREECE.—Statistique Générale. *Annuaire statistique de la Grèce, 1932. Athens, 1933. 508 pp., charts, maps. (In Greek and French.)*

HAGUE (NETHERLANDS).—Statistisch Bureau. *Statistiek van het gemeentepersoneel, 1932. The Hague, 1933. 63 pp., charts.*

Contains statistics relating to salaried employees and wage earners employed by the city government of The Hague in 1932, including data on salaries and wages, sickness, etc. Includes French translations of the table of contents and some table headings.

INDIA.—[Department of Industries and Labor.] *Statistics of factories subject to the Indian Factories Act (XII of 1911), for the year ending December 31, 1932, together with a note on the working of the factories act during the year. Delhi, 1933. 37 pp.*

The average number of factory operatives employed during the year was 1,419,711, a decrease of 11,776 from the average number of the preceding year. Women formed 15.9 percent and children 1.5 percent of the total number. Earnings showed a greater decrease than wage rates, owing to short-time, irregular work, and unemployment. The number of accidents reported was 18,127 against 19,807 in 1931. "Fatal accidents decreased from 174 to 162, serious accidents from 3,693 to 3,513, and minor ones from 15,940 to 14,452. The incidence has decreased from 1,384 per 100,000 operatives in 1931 to 1,277 in 1932."

INTERNATIONAL LABOR OFFICE AND INTERNATIONAL INSTITUTE OF AGRICULTURE.—*Studies and Reports (of the I.L.O.), Series K, No. 12: Studies on movements of agricultural population, I—The rural exodus in Germany, by H. Böker and F. M. von Bülow. Geneva, 1933. 137 pp. (World Peace Foundation, American agent, Boston.)*

Contains the results of investigations made in May 1931 in the Provinces of Pomerania and Saxony and in the Free State of Saxony concerning the extent and causes of the movement of the rural population into the cities in these districts, with suggested measures to arrest the rural exodus.

NETHERLANDS.—Departement van Sociale Zaken. *Centraal verslag der arbeidsinspectie in het koninkrijk der Nederlanden over 1932. The Hague, 1933. 387, lxxxv pp., charts, diagrams, illus.*

Report of the labor inspectorate of the Netherlands for 1932. Includes information on accidents to workers in industry and agriculture; on court decisions in cases coming under the labor laws; on the results of medical examinations of workers in various industries and of special studies of physical defects among workers in a fertilizer factory, of baker's eczema, of the hazards of carbon disulphide in an art-silk factory, and of health conditions among sandblasters and cigarmakers; and on educational activities for women employed in factories. The report is printed entirely in Dutch but is accompanied by a summary in English, issued separately.

PRUSSIA (GERMANY).—Statistiches Landesamt. *Statistisches Jahrbuch für den Freistaat Preussen. Berlin, 1933. 277 pp.*

QUEENSLAND.—Insurance Office. *Seventeenth annual report, for the year ended June 30, 1933. Brisbane, 1933. 47 pp., chart, illus.*

The Government Insurance Office handles workmen's compensation, and fire, life, miscellaneous accident, and marine insurance. The report gives statistics and details of the work done along these lines during the year 1932–33.

SWEDEN.—[Social Departementet.] Pensionsstyrelsen. *Allmänna pensionsförsäkringen, år 1932. Stockholm, 1933. 18 pp.*

Annual report on operations under the old-age and invalidity insurance system in Sweden in 1932. There is a French translation of the table of contents and a résumé in French.

SWITZERLAND.—Bureau Fédéral de Statistique. *Annuaire statistique de la Suisse, 1932. Berne, 1933. 443 pp. (In French and German.)*

Unofficial

AMERICAN PUBLIC HEALTH ASSOCIATION. *Bibliography on lead poisoning. New York, 450 Seventh Avenue. [Mimeographed.]*

This bibliography on lead poisoning is divided into four parts, covering, respectively, 1929–30, 1930–31, 1931–32, and 1932–33. Each part has a section on the relation of lead to cancer.

AYRES, LEONARD P. *The economics of recovery. New York, Macmillan Co., 1933. 189 pp., charts.*

BROWN, DOUGLASS V., AND OTHERS. *The economics of the recovery program. New York, McGraw-Hill Book Co., Inc., 1934. 188 pp.*

In this volume each author treats the problems of recovery from a particular point of view, there being papers on depressions, purchasing power, controlling industry, helping labor, higher prices, helping the farmer, and economics versus politics.

CANADIAN COUNCIL ON CHILD AND FAMILY WELFARE. *Publication No. 66: Sample food budgets for use in families of varying size. Ottawa, Canada, Council House, 1933. 24 pp.*

CHICAGO TRUCK DRIVERS AND CHAUFFEURS UNION, LOCAL 705. *A humanitarian service. [Chicago, 1933?] 21 pp., illus.*

An account of the work done by the medical center maintained by this union, a brief review of which is given in this issue of the Monthly Labor Review.

CLAPHAM, J. H. *An economic history of modern Britain: Free trade and steel, 1850-1886. London, Cambridge University Press, 1932. 554 pp., charts, maps.*

CLEMSON AGRICULTURAL COLLEGE. Agricultural Experiment Station. *Bulletin 263: The use of leisure in selected rural areas of South Carolina, by Mary E. Frayser. Clemson College, 1930. 87 pp., charts.*

This study was undertaken to ascertain how the adults in typical rural areas in South Carolina use their leisure time.

COLLIE, *Sir* JOHN. *Workmen's compensation, its medical aspect. London, Edward Arnold & Co., 1933. 160 pp.*

A summary of the legal rights of injured workers under the Employers' Liability Act of 1880, the Workmen's Compensation Act of 1925, and the relating statutory orders of Great Britain, for the instruction of medical practitioners. Two of the chapters discuss the 33 scheduled industrial diseases included under the compensation act, and silicosis, which was made compensable under certain conditions in 1930.

COLUMBIA UNIVERSITY. Teachers College. Lincoln School. Parent-Teacher Association. *Spend your time: New York's resources for the use of leisure. New York, 1933. 74 pp.*

This publication lists the recreational, educational, and other facilities which New York offers for leisure-time activities.

COMMUNITY COUNCIL OF PHILADELPHIA AND THE PENNSYLVANIA SCHOOL OF SOCIAL WORK. Joint Committee on Research. *Publication No. 6: No money for rent—A study of the rental problems of unemployment relief families and their landlords, by Ewan Clague. [Philadelphia, 1933.] 80 pp., charts.*

DAUGHERTY, CARROLL R. *Labor problems in American industry. Boston, New York, etc., Houghton Mifflin Co., 1933. 959 pp.*

DOANE, ROBERT R. *The measurement of American wealth: A study of the monetary measures of the total wealth, income, expenditures, profits, losses, debts, and savings of American producers, consumers and institutions, from 1860 to 1933. New York, Harper & Bros., 1933. 242 pp., charts.*

HALLE, FANNINA W. *Woman in Soviet Russia. London, Routledge, 1933. 409 pp., illus.*

Contains among other material rather full descriptions of the Soviet methods of caring for maternity and infancy, of the position of women in industry, of the efforts to socialize the housewife's work, and so on. The writer herself regards it as "a report upon the momentary position of an experiment of world-wide historical significance: the experiment, tried for the first time in human history, of according to both sexes the same right to mold our life."

HURLIN, RALPH G. *The number and distribution of social workers in the United States. New York, Russell Sage Foundation, 1933. 11 pp., chart. (Reprinted from Proceedings of National Conference of Social Work at Detroit, June 1933.)*

Comments on the quality of the figures gathered in the first Nation-wide census of social workers, made as a part of the general census of occupations in the United States Census of 1930, and compares some of the returns with figures for other professional or near-professional groups.

INSTITUT INTERNATIONAL DE COOPÉRATION INTELLECTUELLE. *Bibliothèques populaires et loisirs ouvriers. Paris, 2 rue Montpensier, 1933. 333 pp.*

This study covers public libraries and those maintained by employers with particular reference to the utilization of libraries by workers in their leisure time. The study, which covers 15 countries, was made at the request of the International Labor Office.

LANDSORGANISATIONEN I SVERGE. *Berättelse, år 1932, avgiven till representantskapets årsmöte den 10–13 april 1933. Stockholm, 1933. 364 pp., charts.*

Report of the Federation of Swedish Trade Unions for 1932, with comparative data for earlier years. The affiliated membership in December 1932 was 638,593, an increase of 49,417 over December 1931. The report includes information on wages, working hours, industrial disputes and their outcome, trade agreements, unemployment, cost of living, etc.

LAVANBURG, FRED L., FOUNDATION. *What happened to 386 families who were compelled to vacate their slum dwellings to make way for a large housing project. New York, 1933. 12 pp.*

LEISURE. *The Magazine of a Thousand Diversions. Vol. 1, No. 1, November 1933. Boston, 683 Atlantic Ave.*

This periodical, which is to be published once a month, was started in November 1933, the second issue appearing in January 1934. The magazine is dedicated to the constructive and enjoyable use of leisure time and covers practically all types of recreation and hobbies.

MAYO, ELTON. *The human problems of an industrial civilization. New York, MacMillan Co., 1933. 194 pp., charts.*

The writer presents the methods and findings of different groups of workers at Harvard University in their industrial investigations.

MINNESOTA, UNIVERSITY OF. Employment Stabilization Research Institute. *Occupational testing and the public employment service, by John G. Darley, Donald G. Paterson, and I. Emerick Peterson. Minneapolis, 1933. 28 pp., charts, illus.*

The research work of this institute, out of which the occupational testing division developed, has shown that individuals should be directed to economic stability by means of occupational analysis and individual planning.

—— —— *Social consequences of prolonged unemployment: An analysis of 500 cases, by Jessie A. Bloodworth. Minneapolis, 1933. 16 pp.*

The study showed that on January 1, 1933, 45 percent of the individuals covered in the study had been jobless for two years or more; that more than half of those finding jobs had been unemployed for less than a year, and that comparatively few who had been without jobs for two years or over had been successful in securing even short-time jobs.

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC. *Publication No. 23: Production trends in the United States since 1870, by Arthur F. Burns. New York, 51 Madison Avenue, 1934. 363 pp., charts.*

NATIONAL RECREATION ASSOCIATION. *The new leisure challenges the schools, by Eugene T. Lies. Washington, 1201 Sixteenth Street, 1933. 326 pp., illus.*

Reviewed in this issue.

NATIONAL SOCIETY FOR THE PREVENTION OF BLINDNESS, INC. *Publication 112: Examination of the eyes of industrial employees—why and how? By M. Davidson, M.D. New York, 450 Seventh Avenue. 8 pp. (Reprinted from The Sight-Saving Review, March 1933.)*

The paper cites the results of eye examinations of workers, showing the relation of such examinations to the safety problem and to industrial efficiency.

—— *Publication 123: Lighting for the conservation of vision, by Percy W. Cobb, M.D. New York, 450 Seventh Avenue. 15 pp., diagrams. (Reprinted from The Sight-Saving Review, September 1933.)*

The writer discusses lighting requirements in general and for special types of work as well as the importance of correcting eye defects.

NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR. *Idleness and the health of a neighborhood, by Gwendolyn Hughes Berry. New York, 105 E. 22d Street, 1933. 93 pp., map, charts.*

This study of the effect of unemployment upon the health of families was made in the Mulberry District of New York City. The study showed a definite association between high morbidity and poor economic status.

NICHOLS, OSGOOD, AND GLASER, COMSTOCK. *Work camps for America: The German experience and the American opportunity. New York, John Day Co., Inc., 1933. 31 pp.*

The authors hold that a series of work camps similar to those of Germany would, from various viewpoints, be the most effective answer to the problem of unemployed youth in the United States.

PALESTINE ECONOMIC CORPORATION. *Sixth annual report, 1932. New York, 40 Exchange Place, 1933. 54 pp.*

Contains data on housing credits to cooperative associations, etc., in Palestine.

RAGER, FRITZ. *Die Idee der Arbeitslosenversicherung in den Vereinigten Staaten von Amerika, bemerkungen zum Gesetz des Staates Wisconsin. Sonderabdruck das Versicherungsarchiv, Monatsblätter für private und öffentliche Versicherung, Vienna, Nov. 15, 1933, pp. 436–455.*

A discussion of the subject of unemployment insurance in the United States, with special reference to the Wisconsin law of January 29, 1932.

REEDER, RUDOLPH R. *Training youth for the new social order. Yellow Springs, Ohio, Antioch Press, 1933. 248 pp., illus.*

According to the foreword, this volume attempts to provide "a whole program for the whole child," and to present experimental training methods which will prepare youth for social cooperation, responsibility, and leadership.

REICHSKURATORIUM FÜR WIRTSCHAFTLICHKEIT. *RKW-Veröffentlichungen Nr. 87: Der Mensch und die Rationalisierung, III—Eignung und Qualitätsarbeit. Jena, 1933. 298 pp.*

Deals with the qualifications of the workers and the quality of their output in various industries and occupations.

SAMSON, LEON. *Toward a united front: A philosophy for American workers. New York, Farrar & Rinehart, Inc., 1933. 276 pp.*

SIPOS, ALEXANDER. *Ungarns Stellung in der Weltwirtschaftskrise. Budapest, 1933. 31 pp. (Sonderabdruck aus Gratz-Bokor Ungarisches Wirtschafts-Jahrbuch, IX, Jahrgang, 1933.)*

Deals with economic conditions in Hungary during the present world-wide depression, including production and price levels.

SOCIAL SCIENCE RESEARCH COUNCIL. *Bulletin No. 6: Research in agricultural income—scope and method. New York, 230 Park Avenue, 1933. 158 pp.*

SOCIETY OF INDUSTRIAL ENGINEERS. Buffalo Chapter. *Bibliography of time-study engineering, or time study, motion study, wage incentives, and fatigue in industry. New York, H. W. Wilson Co., 1933. 63 pp.*

WHITEHEAD, GEORGE. *Unemployment: Causes and remedies. London, John Bale, Sons & Danielsson, Ltd., 1933. 434 pp.*

The writer discusses the magnitude of the unemployment problem, pre-war causes, unemployment from 1920 to the world slump of 1929, currency and the crisis of 1931, overpopulation, foreign trade, rationalization, and various reasons why costs are high.

WINSLOW, C.-E. A., M.D. *A city set on a hill: The significance of the health demonstration at Syracuse, N.Y. Garden City, N.Y., Doubleday, Doran & Co., Inc., 1934. 367 pp., charts, illus.*

The results of a planned experiment in health protection, started in 1923 by the city of Syracuse with the assistance of the Milbank Memorial Fund, are described in this volume. In addition to the account of what was accomplished the book provides a critical appraisal of a modern public health administration.

WISCONSIN, UNIVERSITY OF. Bureau of Economics and Sociology. *Unemployed? Opportunities. Madison, 1932. 47 pp.*

Brief accounts of how various resourceful unemployed persons found remunerative work.

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